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FIELD PROGRAM FOR JULY, 1909

OFFICE OF THE FORESTER

GIFFORD PINCHOT, Forester.

OVERTON W. PRICE, Associate Forester.

HARRY L. HILL, Secretary to the Forester.

P. P. WELLS, Law Officer.

A. C. SHAW, Assistant Law Officer.

HERBERT A. SMITH, Editor.

FINDLEY BURNS, in charge of Publication.

RAYMOND W. PULLMAN, in charge of Information.

GEORGE B. SUDWORTH, Dendrologist.

R. S. KELLOGG, Assistant Forester, engaged upon Forest Statistics.

EUGENE S. BRUCE, Expert Lumberman.

D. D. BRONSON, }
R. E. BENEDICT, } General Inspectors.

E. M. GRIFFITH, Special Inspector for Indian Reservations in Wisconsin, Madison, Wis.

OPERATION

JAMES B. ADAMS, Assistant Forester, in Charge.

CHAS. S. CHAPMAN, Assistant Forester.

GEORGE G. ANDERSON, Assistant in Office Methods.

ACCOUNTS

H. B. CRAMER, Fiscal Agent.

E. A. MELZAR, District Fiscal Agent.

GEOGRAPHY

F. G. PLUMMER, Chief.

Atlas, G. B. BRUCE, Acting.

Drafting, C. A. KOLB.

Alienation, J. B. SATTERLEE.

Photography, A. G. VARELA.

MAINTENANCE

GEORGE A. BENTLEY, Chief.

SILVICULTURE

WILLIAM T. COX, Assistant Forester, in Charge.
E. E. CARTER, Assistant Forester (in the Field).

FEDERAL COOPERATION

A. B. PATTERSON, Chief.
H. IRION, Assistant.

PROJECTS

Minnesota—

Timber examination on Red Lake Indian Reservation—PATRICK KENNEDY and J. A. HOWARTH, Jr., Red Lake.

Wisconsin—

Lumbering operations on the Menominee Indian Reservation—E. A. BRANIFF, Neopit.

Inspection of logging on the Bad River and other Indian Reservations in northern Wisconsin—T. F. YOUNG, MARK BURNS, and W. H. FARR, Ashland.

STATE AND PRIVATE COOPERATION

J. G. PETERS, Chief (in the Field).
J. H. FOSTER, Acting Chief.

PROJECTS

Alabama—

Preparation of a working-plan report for the Tennessee Coal, Iron, and Railroad Company—E. D. CLARK and G. T. BACKUS, Washington, D.C.

Eastern States—

General inspection of experiments in nursery and planting work, in cooperation with different States—E. O. SIECKE and W. M. MOORE, Washington, D. C.

Kentucky—

Study of forest conditions in cooperation with State Board of Agriculture, Forestry, and Immigration—R. C. HALL, W. H. VON BAYER, F. F. MOON, and J. M. BRISCOE, Franklin.

North Carolina—

Study of forest conditions, in cooperation with North Carolina Geological and Economic Survey—J. S. HOLMES, W. B. WILLEY, and A. W. WILLIAMSON, Chapel Hill.

New York—

Preliminary examination of forest lands, in cooperation with Whitherbee, Sherman & Co.—B. MACKAYE, Mineville.

Virginia—

Preliminary examination of forest conditions, in cooperation with the State—W. W. ASHE, Richmond.

SILVICS

RAPHAEL ZON, Chief.

PROJECTS

General—

Seed testing and seed storage—N. H. GRUBB, Washington, D. C.

Northeastern States—

Study of northern hardwoods—E. H. FROTHINGHAM, Portland, Me.

Western States—

Location of insect-infested timber in the National Forests, with practical application of methods of insect control—W. D. EDMONSTON (detailed to the Bureau of Entomology under instructions from Dr. A. D. HOPKINS, in charge of forest-insect investigations), Colorado Springs, Colo.

Computing, E. A. ZIEGLER (in the Field).

Library, Miss H. E. STOCKBRIDGE.

GRAZING

A. F. POTTER, Assistant Forester (in the Field).

L. F. KNEIPP, Assistant Forester (in the Field).

WILL C. BARNES, Acting Assistant Forester, in Charge.

PROJECTS

Forage investigations; compilation of data—F. V. COVILLE, Botanist, Bureau of Plant Industry, in charge, Washington, D. C.; JAMES T. JARDINE, Deputy Forest Supervisor, Wallowa, Oreg., and ARTHUR T. SAMPSON, Plant Ecologist, Wallowa, Oreg.

Identification of grasses and plants—Dr. EDWARD L. GREENE, Consulting Expert, Washington, D. C.

PRODUCTS

WM. L. HALL, Assistant Forester, in Charge (in the Field).

MCGARVEY CLINE, Assistant Forester.

WOOD PRESERVATION

HOWARD F. WEISS, in Charge.

JOHN M. NELSON, Jr., Assistant.

PROJECTS

Construction and experimental operation of a wood-preserving plant, in cooperation with the Alabama Wood Preserving Company—EDWARD H. FORD, Birmingham, Ala.

Experimental operation of a treating plant, in cooperation with the Indianapolis, Columbus and Southern Traction Company—C. P. WINSLOW, Columbus, Ind.

Experimental operation of a commercial nonpressure plant for the treatment of mine timbers, in cooperation with the Philadelphia and Reading Coal and Iron Company—J. M. NELSON, Jr., Washington, D. C.; assistant detailed by the company, L. W. Conrad, Pottsville, Pa.

Design and construction of apparatus for the prevention of sap stain and for a wood-preserving plant, in cooperation with the Great Southern Lumber Co.—C. T. BARNUM, Washington, D. C.

Construction and experimental operation of a low-pressure wood-preserving plant, in cooperation with the War Department, Picatinny Arsenal, Dover, N. J. (after July 15).

Special investigations into the supply and production of possible wood preservatives—E. W. PETERS, Washington, D. C.

TIMBER TESTS

ROLF THELEN, in Charge.

PROJECTS

Timber-testing laboratory, New Haven, Conn., in cooperation with Yale University—H. D. TIEMANN in charge; assistants, H. E. MCKENZIE and CORNELIUS BARRY; W. D. BRUSH, microscopist:

Study of the effect of drying on the strength and other properties of wood;

Study of the effect of drying on the absorption of water by wood;

Microscopic study of the mechanical failure of wood.

Timber-testing laboratory, Lafayette, Ind., in cooperation with Purdue University—W. K. HATT in charge; assistants, J. A. NEWLIN, J. O. BIXBY, THOMAS LYONS, and HARRY WEYLS.

Study of the effect of creosoting on the strength of southern pine, in cooperation with the Illinois Central Railway;

Study of the physical properties of several species of hickory, in cooperation with the National Hickory Association.

WOOD CHEMISTRY

H. S. BRISTOL, in Charge.

H. E. SURFACE, Assistant.

PROJECTS

Study of methods of wood distillation and for the standardization and grading of turpentines—L. F. HAWLEY; Assistant, F. E. LICHTENTHAELER, both at Madison, Wis.

Experiments with various woods for paper pulp—E. SUTERMEISTER; Assistant, J. L. MERRILL, both at Washington, D. C.

Study of wood preservatives and of chemical problems in wood utilization—E. BATEMAN; Assistant, C. F. SPEH, both at Washington, D. C.

WOOD UTILIZATION

H. S. SACKETT, in Charge.

PROJECTS

Study of the wood-using industries in Illinois in cooperation with the State Laboratory of Natural History—FRANKLIN H. SMITH, 1418 Fisher Building, Chicago.

Study of the wood-using industries in Kentucky in cooperation with the State Board of Agriculture, Forestry and Immigration—H. S. SACKETT, Washington, D. C.

Study of the wood-using industries of Massachusetts in cooperation with F. W. Rane, State Forester, State House, Boston, Mass.—H. S. SACKETT, Washington, D. C.

Study of the wood-using industries of North Carolina in cooperation with the North Carolina Geological Survey—HU MAXWELL, Washington, D. C.

Collection of wholesale lumber prices in the markets and f. o. b. mill prices—FRANKLIN H. SMITH, 1418 Fisher Building, Chicago, Ill.

Preparation of reports upon the uses of the principal commercial woods—HU MAXWELL, Washington, D. C.

DISTRICTS

DISTRICT 1

Montana, northeastern Washington, northern Idaho, northwestern South Dakota, northern Michigan, northern Minnesota, and southwestern North Dakota.

Office, Hammon Block, Missoula, Mont.

W. B. GREELEY, District Forester.

F. A. SILCOX, Assistant District Forester.

W. M. AIKEN, District Law Officer.

OPERATION

R. H. RUTLEDGE, Chief.

R. Y. STUART, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, **H. I. LOVING**, District Fiscal Agent.

Maintenance, **R. L. CAMPBELL**.

SILVICULTURE

A. W. COOPER, Chief (in the Field).

D. T. MASON, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Idaho—

Reconnaissance of timber on Lightning Creek, Pend Oreille National Forest, preliminary to possible sale—**J. A. FITZWATER**, Sandpoint.

Check scaling, Coeur d'Alene National Forest—**G. L. COTT**, Wallace.

Montana—

Estimate of timber, with classification and appraisal of land, on Northern Pacific Railway sections in cooperation with the railway—**KARL W. WOODWARD**, Missoula;

Deerlodge and Helena National Forests, W. B. PIPER, Boulder; Absaroka National Forest, N. C. BROWN, Livingston; Jefferson National Forest, R. C. HAWLEY, Great Falls; Blackfeet and Cabinet National Forests, L. S. MURPHY, Kalispell; Lolo and Missoula National Forests, E. D. FLETCHER, Missoula.

Planting, Chief and Assistant Chief of Silviculture.

PROJECTS

Inspection of Madison and Gallatin National Forests in preparation of five-year planting plans and the location of an additional nursery—E. C. CLIFFORD, Bozeman, Mont.

Work on the Boulder Nursery—G. B. McDONALD, Boulder, Mont.

Silvics, Chief and Assistant Chief of Silviculture.

PROJECT

Collection of data for a yellow pine volume table, Bitterroot National Forest—E. I. TERRY, Darby, Mont.

GRAZING

C. H. ADAMS, Chief.

W. S. PERRINE, Assistant Chief (in the Field).

PRODUCTS

PROJECTS

Wood Preservation—

Construction and experimental operation of a wood-preserving plant for treating fence posts and other ranch timbers, in cooperation with the Bitter Root Stock Farm—P. R. HICKS, Missoula, Mont.

Preliminary report on and preparation of plans for a treating plant, in cooperation with the Anaconda Copper Mining Co.—P. R. HICKS, Missoula, Mont.

NATIONAL FORESTS

IDAHO

Beaverhead—See Montana.

Clearwater—F. A. FENN, Forest Supervisor, Kooskia (WU-N).

Coeur d'Alene—W. G. WEIGLE, Forest Supervisor, Wallace (WU-N); E. R. BRUNKE, Deputy Forest Supervisor; RUTLEDGE PARKER, Forest Assistant.

Kaniksu—See Washington.

Nezperce—GEO. V. RING, Forest Supervisor, Grangeville (WU-N).

Pend Oreille—J. E. BARTON, Forest Supervisor, Sandpoint (W-UN, W).

MICHIGAN

Marquette }
Michigan } —Not under administration.

MINNESOTA

Minnesota—G. E. MARSHALL, Forest Supervisor, Cass Lake (WU-GN).

Superior—J. S. BAIRD, Acting Forest Supervisor, Ely (WU-GN).

MONTANA

Absaroka—V. GIFFORD LANTRY, Forest Supervisor, Livingston (WU-N); HARRY S. KAUFMAN, Deputy Forest Supervisor.

Beartooth—E. C. RUSSELL, Forest Supervisor, Red Lodge (WU-N); J. F. PRESTON, Deputy Forest Supervisor.

Beaverhead—C. K. WYMAN, Forest Supervisor, Dillon (WU-P); R. J. MOORE, Deputy Forest Supervisor.

Bitterroot—W. W. WHITE, Forest Supervisor, Missoula (WU-N).

Blackfeet—F. N. HAINES, Forest Supervisor, Kalispell (WU-GN); R. P. McLAUGHLIN, Deputy Forest Supervisor; C. N. WHITNEY, Forest Assistant.

Cabinet—RALPH H. BUSHNELL, Acting Forest Supervisor, Thompson Falls (WU-N).

Custer—GLEN A. SMITH, Acting Forest Supervisor, Ashland (WU via Forsyth-N via Forsyth).

Deerlodge—C. C. HALL, Forest Supervisor, Anaconda (P-N); F. S. PATTON, Forest Assistant.

Flathead—PAGE S. BUNKER, Forest Supervisor, Kalispell (WU-GN).

Gallatin—D. T. CONKLING, Forest Supervisor, Bozeman (WU-N); A. A. SAUNDERS, Forest Assistant.

Helena—DWIGHT BUSHNELL, Forest Supervisor, Helena (WU-N); J. D. WARNER, Deputy Forest Supervisor.

Jefferson—J. B. SEELY, Forest Supervisor, Great Falls (WU-N).

Kootenai—DORR SKEELS, Acting Forest Supervisor, Libby (WU-GN).

Lewis and Clark—W. H. DAUGS, Forest Supervisor, Chouteau (WU via Collins-GN via Collins).

Lolo—ELERS KOCH, Forest Supervisor, Missoula (WU, P-N); M. N. STICKNEY, Forest Assistant.

Madison—CLIFTON W. HUDSON, Acting Forest Supervisor, Sheridan (WU-N).

Missoula—D. G. KINNEY, Forest Supervisor, Missoula (WU, P-N).

Sioux—See South Dakota.

NORTH DAKOTA

Dakota—C. A. BALLINGER, Forest Supervisor, Camp Crook, S. Dak. (WU via Belle Fourche-Am via Belle Fourche).

SOUTH DAKOTA

Sioux—C. A. BALLINGER, Forest Supervisor, Camp Crook (WU via Belle Fourche-Am via Belle Fourche).

WASHINGTON

Kaniksu—W. N. MILLAR, Acting Forest Supervisor, Newport (WU-GN); WM. C. LATANE, Forest Assistant.

DISTRICT 2

Colorado, Wyoming, South Dakota, Nebraska, and western Kansas.

Office, Majestic Building, Denver, Colo.

SMITH RILEY, District Forester.

P. G. REDINGTON, Assistant District Forester.

J. M. CATES, District Law Officer.

OPERATION

FRED W. MORRELL, Chief.

C. J. STAHL, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, **JOHN A. URBANOWICZ**, District Fiscal Agent.

Maintenance, **F. B. AGEE**.

SILVICULTURE

A. K. CHITTENDEN, Chief.

S. L. MOORE, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Colorado—

Special timber sale work, San Juan National Forest—**W. R. MCKINNON**, Edith, N. Mex.

Special timber sale work, Routt National Forest—**J. E. ELLIOTT**, Steamboat Springs.

South Dakota—

Supervision of logging and fire protection, Pine Ridge Indian Reservation—**LOUIS KNOWLES**, Deadwood.

Supervision of logging, Rosebud Indian Reservation—**ROBERT EMERY**, Rosebud.

Planting, **L. C. MILLER**.

PROJECT

Colorado

Preparation of five-year plans for planting and sowing for San Isabel and Las Animas National Forests—**R. G. PIERCE**, Westcliffe.

Silvics, **C. G. BATES**.

PROJECT

Establishment of permanent sample plots on the Black Hills and Cheyenne National Forests—**C. G. BATES**; **D. E. FINKBINER**, and **H. K. RUPP**, Assistants.

GRAZING

J. W. NELSON, Chief.

E. N. KAVANAGH, Assistant Chief.

PRODUCTS

C. L. HILL, in Charge.

PROJECTS

Timber Tests—

Timber-testing laboratory in cooperation with the University of Colorado, Boulder, Colo.—A. L. HEIM in charge; Assistant, T. W. VENNEMAN:

Tests on round timbers of various Rocky Mountain species, including mine timbers, in cooperation with the Northern Coal and Coke Company and various National Forests.

Tests on western red cedar, lodgepole pine, and Engelmann spruce telephone poles in cooperation with the South Platt Power Company, Central Colorado Power Company, and the Colorado Telephone Company.

Tests on western yellow pine and Colorado Douglas fir cross-ties in cooperation with the Denver, Boulder and Western Railway Company.

Tests on trestle timbers in cooperation with the Denver City Tramway Company.

Wood Preservation—

Preservative treatment of railway cross-ties in cooperation with the Colorado Midland Railway Company—D. L. CARMODY, Norrie, Colo.

Construction and operation of treating plant in cooperation with the Homestake Mining Company—HARRY MILLS MASON, Jr., Lead City, Colo.

Preservative treatment of telephone poles in cooperation with Robert Reed—D. L. CARMODY, Norrie, Colo.

Wood Utilization—

Study of wood-using industries—H. B. HOLROYD, Denver, Colo.

NATIONAL FORESTS

COLORADO

Arapaho—C. G. POOLE, Acting Forest Supervisor, Sulphur Springs (WU-Ad).

Battlement—DAVID ANDERSON, Forest Supervisor, Collbran (WU-WF, G); JOHN W. LOWELL, Jr., Deputy Forest Supervisor.

Cochetopa—EUGENE WILLIAMS, Forest Supervisor, Saguache (WU-G).

Gunnison—WM. R. KREUTZER, Forest Supervisor, Gunnison (WU-WF, G); E. C. BERKY, Deputy Forest Supervisor.

Hayden—See Wyoming.

Holy Cross—HARRY H. FRENCH, Forest Supervisor, Glenwood Springs (WU-WF, G); JAY HIGGINS, Forest Assistant.

La Sal—See Utah.

Las Animas—C. A. WHITNEY, Acting Forest Supervisor, La Veta (WU-G).

- Leadville**—A. L. STROUP, Forest Supervisor, Leadville (WU, P-WF, G); J. E. MARTIN, Forest Assistant.
- Medicine Bow**—H. N. WHEELER, Forest Supervisor, Fort Collins (WU-WF); C. M. GRANGER, Deputy Forest Supervisor.
- Montezuma**—RESS PHILLIPS, Forest Supervisor, Mancos (WU-G).
- Pike**—C. W. FITZGERALD, Forest Supervisor, Denver (WU, P-Ad, G, P, US, WF); W. J. MORRILL, Deputy Forest Supervisor; Pikes Peak Nursery—W. SCHRADER, Forest Planting Assistant, Monument.
- Rio Grande**—F. C. SPENCER, Forest Supervisor, Monte Vista (WU-G); P. T. COOLIDGE, Forest Assistant.
- Routt**—J. H. RATLIFF, Acting Forest Supervisor, Steamboat Springs (WU-Ad).
- San Isabel**—J. N. LANGWORTHY, Acting Forest Supervisor, Westcliffe (WU-G).
- San Juan**—ERNEST W. SHAW, Forest Supervisor, Durango (WU-G); A. L. SWEITZER, Deputy Forest Supervisor; PETER KEPLINGER, Forest Assistant.
- Sopris**—JOHN McLAREN, Acting Forest Supervisor, Aspen (WU-WF, G); JAY HIGGINS, Forest Assistant.
- Uncompahgre**—HENRY L. SPENCER, Acting Forest Supervisor, Delta (WU-G); J. H. RAMSKILL, Forest Assistant.
- White River**—JAMES A. BLAIR, Forest Supervisor, Meeker (WU-WF, G).

KANSAS

- Kansas**—B. R. H. D'ALLEMAND, Acting Forest Supervisor, Garden City (WU, P-WF); Garden City Nursery—C. R. TAYLOR, Forest Planting Assistant.

NEBRASKA

- Nebraska**—W. H. MAST, Forest Supervisor, Halsey (WU-Ad); H. R. SHOCKLEY, Deputy Forest Supervisor; Halsey Nursery—L. BESLEY and C. R. BECHTLE, Forest Planting Assistants.

SOUTH DAKOTA

- Black Hills**—PAUL D. KELLETER, Acting Forest Supervisor, Deadwood (WU-Ad, Am); JOHN MURDOCH, Jr., and ROBERT E. CLARK, Forest Assistants.

WYOMING

- Bighorn**—W. E. JACKSON, Forest Supervisor, Sheridan (WU-Ad); HERBERT GRAFF, Deputy Forest Supervisor.
- ✓ **Bonneville**—FOSTER STEELE, Acting Forest Supervisor, Pinedale (WU-P); H. EARLE FRENCH, Forest Assistant.
- Cheyenne**—P. S. LOVEJOY, Acting Forest Supervisor, Laramie (WU, P-P); R. A. STRETCH and ARTHUR M. COOK, Forest Assistants.
- Hayden**—JAMES BLACKHALL, Acting Forest Supervisor, Encampment (WU, P-P).
- Shoshone**—H. W. THURSTON, Forest Supervisor, Cody (WU-Ad).
- Sundance**—FRANK S. THOMSON, Acting Forest Supervisor, Sundance (WU-Ad, Am).

DISTRICT 3

Arizona, Arkansas, Florida, New Mexico, and Oklahoma.

Office, Strickler-Luna Building, Albuquerque, N. Mex.

A. C. RINGLAND, District Forester.

E. H. CLAPP, Assistant District Forester.

H. B. JAMISON, District Law Officer.

BLAKE FRANKLIN, Assistant District Law Officer.

OPERATION

A. O. WAHA, Chief.

A. S. PECK, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, **J. J. DUFFY**, District Fiscal Agent.

Maintenance, **W. B. BUNTON**.

SILVICULTURE

T. S. WOOLSEY, Jr., Chief.

A. B. RECKNAGEL, Assistant Chief.

Timber Sales, **J. F. ELDREDGE**, Acting.

PROJECT

Arizona—

Supervision of cutting, San Carlos Indian Reservation—**J. J. WOOLSEY**, San Carlos.

Planting, **R. L. ROGERS**.

Silvics, **G. A. PEARSON**, Coconino Forest Experiment Station, Flagstaff, Ariz.

H. D. BURRALL, Assistant, Coconino Forest Experiment Station, Flagstaff, Ariz.

GRAZING

J. K. CAMPBELL, Chief.

JOHN KERR, Assistant Chief.

PRODUCTS

PROJECT

Wood Preservation—

Treatment of 600 telephone poles on Coconino National Forest—**O. T. SWAN**, care Supervisor **Frank C. W. POOLER**, Flagstaff, Ariz.

NATIONAL FORESTS

ARIZONA

- Apache**—JOHN D. GUTHRIE, Forest Supervisor, Springerville (WU, P-WF); W. H. KOBBE, Forest Assistant.
- Chiricahua**—A. H. ZACHAU, Forest Supervisor, Douglas (WU, P-WF).
- Coconino**—FRANK C. W. POOLER, Forest Supervisor, WILLARD M. DRAKE, Deputy Forest Supervisor, Flagstaff (WU, P-WF).
- Coronado**—ROBERT J. SELKIRK, Forest Supervisor, Tucson (WU, P-WF).
- Crook**—T. T. SWIFT, Forest Supervisor, Safford (WU-WF).
- Garces**—W. H. B. KENT, Forest Supervisor, Nogales (WU-WF).
- Prescott**—C. H. HINDERER, Forest Supervisor, Prescott (WU-WF).
- Sitgreaves**—A. J. MACKAY, Forest Supervisor, Snowflake (WU, P-WF).
- Tonto**—R. G. WILLSON, Forest Supervisor, J. W. FARMER, Deputy Forest Supervisor, Roosevelt (WU-WF).

ARKANSAS

- Arkansas**—S. J. RECORD, Forest Supervisor, Mena (WU-WF); FRANCIS KIEFER, Forest Assistant.
- Ozark**—DAVID E. FITTON, Forest Supervisor, Harrison (WU-WF); W. F. HILL, Deputy Forest Supervisor.

FLORIDA

- Choctawhatchee** } —Not under administration.
Ocala }

NEW MEXICO

- Alamo**—ARTHUR M. NEAL, Forest Supervisor, Alamogordo (WU, P-WF).
- Carson**—ROSS McMILLAN, Forest Supervisor, Antonito, Colo. (WU-G).
- Chiricahua**—See Arizona.
- Datil**—W. H. GODDARD, Forest Supervisor, Magdalena (WU, P-WF); R. F. BALTHIS, Deputy Forest Supervisor.
- Gila**—DOUGLAS RODMAN, Forest Supervisor, Silver City (WU-WF); FRANK E. ANDREWS, Deputy Forest Supervisor; H. G. CALKINS, Forest Assistant. Fort Bayard Nursery—H. C. TURNER, Forest Planting Assistant.
- Jemez**—THOS. R. STEWART, Acting Forest Supervisor, Santa Fe (WU, P-WF); HARRY H. POOLER, Forest Agent.
- Lincoln**—J. A. KINNEY, Forest Supervisor, Capitan (WU, P-WF).
- Manzano**—W. R. MATTOON, Forest Supervisor, Albuquerque (WU, P-WF).
- Pecos**—THOS. R. STEWART, Acting Forest Supervisor, Santa Fe (WU, P-WF); HARRY H. POOLER, Forest Agent. Las Gallinas Nursery—A. HEDRICKS, Forest Planting Assistant.
- Zuni**—A. D. READ, Forest Supervisor, Gallup (WU, P-WF).

OKLAHOMA

- Wichita**—FRANK RUSH, Acting Forest Supervisor, Cache (WU-WF).

DISTRICT 4

Utah, southern Idaho, western Wyoming, eastern Nevada, and northwestern Arizona.

Office, First National Bank Building, Ogden, Utah.

CLYDE LEAVITT, District Forester.

FRANKLIN W. REED, Assistant District Forester.

W. C. HENDERSON, District Law Officer.

OPERATION

R. P. IMES, Chief.

E. H. CLARKE, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, **Q. R. CRAFT**, District Fiscal Agent.

Maintenance, **FELIX T. MOORE**.

SILVICULTURE

L. L. WHITE, Chief.

O. M. BUTLER, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

Planting, **J. M. FETHEROLF**.

Silvics, **E. R. HODSON**.

GRAZING

HOMER E. FENN, Chief.

A. C. MCCAIN, Assistant Chief.

SUPPLY DEPOT

A. M. SMITH, Property Clerk.

PROPERTY AUDIT

J. G. FALCK, Property Auditor.

NATIONAL FORESTS

ARIZONA

Dixie—See Utah.

Kaibab—**JOHN H. CLARK**, Forest Supervisor, Kanab, Utah (WU-WF); **DANIEL K. JUDD**, Deputy Forest Supervisor.

IDAHO

- Boise**—E. GRANDJEAN, Forest Supervisor, Boise (WU-P); WALTER A. HOPSON, and D. C. A. GALARNEAU, Forest Assistants.
- Cache**—See Utah.
- Caribou**—N. E. SNELL, Forest Supervisor, Idaho Falls (WU-P); JAMES H. JOHNSON, Grazing Assistant.
- Challis**—DAVID LAING, Forest Supervisor, Challis (WU-P); JOHN A. PEARSON, Deputy Forest Supervisor.
- Idaho**—HENRY A. BERGH, Forest Supervisor, Elo (WU-P).
- Lemhi**—C. I. HUDDLE, Forest Supervisor, Mackay (WU-P); JAMES L. PELTON, Deputy Forest Supervisor.
- Minidoka**—WM. MCCOY, Forest Supervisor, Oakley (WU-P).
- Payette**—GUY B. MAINS, Forest Supervisor, Emmett (WU-P); CARL B. ARENTSON, Deputy Forest Supervisor.
- Pocatello**—CLINTON G. SMITH, Forest Supervisor, Pocatello (WU-P); Pocatello Nursery—P. T. WRENSTED, Forest Ranger.
- Salmon**—GEORGE G. BENTZ, Forest Supervisor, Salmon (WU-P); JAS. M. RYAN, Deputy Forest Supervisor; F. T. MCLEAN, Forest Assistant.
- Sawtooth**—C. N. WOODS, Forest Supervisor, Hailey (WU-P); H. G. MCPHETERS, Deputy Forest Supervisor; FRANK J. RYDER, Forest Assistant.
- Targhee**—DAVID BARNETT, Forest Supervisor, St. Anthony (WU-P); J. F. BRUINS, Deputy Forest Supervisor; LUCAS W. HASTINGS, Grazing Assistant.
- Weiser**—J. B. LAFFERTY, Forest Supervisor, Weiser (WU-P); W. M. CAMPBELL, Deputy Forest Supervisor; A. E. OMAN, Forest Assistant.

NEVADA

- Humboldt**—C. SYDNEY TREMEWAN, Forest Supervisor, Elko (WU-WF); W. W. BLAKESLEE, Deputy Forest Supervisor.
- Moapa**—HARRY E. MATHEWS, Acting Forest Supervisor, Las Vegas (WU-WF).
- Nevada**—R. F. MATHIAS, Acting Forest Supervisor, Ely (WU-WF).
- Toiyabe**—M. S. BENEDICT, Forest Supervisor, Austin (WU, P-WF).

UTAH

- Ashley**—W. M. ANDERSON, Forest Supervisor, Vernal (WU-WF).
- Cache**—W. W. CLARK, Forest Supervisor, Logan (WU-P); J. E. ROTHERY, Deputy Forest Supervisor.
- Dixie**—JAMES E. JEWELL, Acting Forest Supervisor, St. George (WU-WF).
- Fillmore**—WM. HURST, Forest Supervisor, Beaver (WU-WF).
- Fishlake**—CHARLES L. SMITH, Forest Supervisor, Salina (WU-WF); OLUF G. NIELSON, Deputy Forest Supervisor.
- La Sal**—JOHN RISS, Forest Supervisor, Moab (WU-WF).
- Manti**—A. W. JENSEN, Forest Supervisor, Ephraim (WU-WF); ERNEST WINKLER, Deputy Forest Supervisor; LINCOLN CROWELL, Forest Assistant; PARLEY CHRISTIANSEN, Grazing Assistant.
- Minidoka**—See Idaho.

Nebo—DAN S. PACK, Forest Supervisor, Nephi (WU-WF).

Pocatello—See Idaho.

Powell—GEO. H. BARNEY, Forest Supervisor, Escalante (WU-WF).

Sevier—O. C. SNOW, Forest Supervisor, Panguitch (WU-WF); FRANK W. SEAMAN, Deputy Forest Supervisor.

Uinta—W. I. PACK, Forest Supervisor, Provo (WU-WF); H. F. STUDLEY, Deputy Forest Supervisor; W. JONES BOWEN, Grazing Assistant.

Wasatch—R. V. R. REYNOLDS, Acting Forest Supervisor, Salt Lake City (WU, P-WF, P); WILLIAM M. MCGHIE, Deputy Forest Supervisor; Wasatch Nursery—N. J. FETHEROLF, Forest Planting Assistant.

WYOMING

Ashley—See Utah.

Caribou—See Idaho.

Targhee—See Idaho.

Teton—R. E. MILLER, Forest Supervisor, Jackson (WU-P).

Wyoming—JOHN RAPHAEL, Forest Supervisor, Afton (WU-P).

DISTRICT 5

California and southwestern Nevada.

Office, First National Bank Building, San Francisco, Cal.

F. E. OLMSTED, District Forester.

COERT DUBOIS, Assistant District Forester.

E. A. LANE, District Law Officer.

OPERATION

R. L. FROMME, Chief.

ROY HEADLEY, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, CLARENCE WILEY, District Fiscal Agent.

Maintenance, A. L. DAHL.

SILVICULTURE

G. M. HOMANS, Chief.

T. D. WOODBURY, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Supervision of operations on the Standard Lumber Company's timber sale, Stanislaus National Forest—J. C. ELLIOTT, Sonora, Cal.

Collection of data for volume and growth tables for leading commercial species of trees in the Sierras—S. W. ALLEN, GERALD KENNEDY, and FREDERICK THOMAS, Sonora, Cal.

Examination of timber trespass and of proposed sale areas in the recent addition to the Lassen National Forest—C. H. ENSIGN, Red Bluff, Cal.

Examination of proposed sale areas on the Trinity National Forest—L. MARGOLIN, Weaverville, Cal.

Planting, G. W. PEAVY; C. A. KUPFER, Assistant.

PROJECT

Examination and mapping of lands suitable for planting on the Cleveland National Forest—C. A. KUPFER, San Diego, Cal.

Silvics—

Establishment of sample plots and organization of silvical work—S. T. DANA, San Francisco, Cal.

GRAZING

JOHN H. HATTON, Chief.

M. B. ELLIOTT Assistant Chief.

PRODUCTS

C. S. SMITH, in Charge.

PROJECTS

Timber Tests—

Testing laboratory in cooperation with the University of California, Berkeley, Cal.—H. S. BETTS, in charge; Assistant, G. R. GESSERT:

Tests on California eucalypts;

Tests on redwood in cooperation with the California Redwood Association;

Tests on tanbark oak in cooperation with the Northwestern Redwood Company.

Wood Preservation—

Operation of an experimental wood-preserving plant in cooperation with the Southern Pacific Company—C. S. SMITH, San Francisco, Cal.

Experiments to determine the best methods of seasoning *Eucalyptus globulus* poles and logs, in cooperation with the estate of Adolph Sutro, The Pacific Land Investment Company, the Mount Tamalpais Cemetery Association, and the Parkside Realty Company—J. V. WULFF, San Francisco, Cal.

NATIONAL FORESTS

CALIFORNIA

Angeles—R. H. CHARLTON, Forest Supervisor, Los Angeles (WU, P-WF); ERNEST B. LONG, Deputy Forest Supervisor; Lytle Creek Nursery—SEROPE Y. PARNAY, Forest Planting Assistant, San Bernardino.

California—ERNEST BRITTEN, Forest Supervisor, Willows (P-WF); N. B. DREW, Deputy Forest Supervisor.

Cleveland—H. A. E. MARSHALL, Forest Supervisor, San Diego (WU, P-WF); PERCY L. DAY, Deputy Forest Supervisor; F. L. RICKEY, Planting Assistant.

Inyo—A. H. HOGUE, Forest Supervisor, Bishop (WU-WF).

Klamath—FRANK W. HARLEY, Acting Forest Supervisor, Yreka (P-WF); R. G. POND, Forest Assistant.

Lassen—L. A. H. KLING, Forest Supervisor, Red Bluff (P-WF); J. C. LA PLANT, Deputy Forest Supervisor.

Modoc—C. E. RACHFORD, Forest Supervisor, Alturas (P-WF); VERNON L. BONNER, Deputy Forest Supervisor.

Mono—See Nevada.

Monterey—RAYMOND TYLER, Forest Supervisor, Salinas (WU-WF).

Plumas—L. A. BARRETT, Forest Supervisor, Quincy (WU-WF); W. G. DURBIN, Deputy Forest Supervisor; J. R. HALL, Forest Assistant.

San Luis—E. S. MAINWARING, Forest Supervisor, San Luis Obispo (WU-WF).

Santa Barbara—WILLIS M. SLOSSON, Forest Supervisor, Santa Barbara (P-WF); H. G. MERRILL, Deputy Forest Supervisor.

Sequoia—E. A. SHERMAN, Forest Supervisor, Hot Springs, Tulare County (WU via Portersville-WF); W. C. BURTON, Deputy Forest Supervisor; W. M. MAULE, Forest Assistant.

Shasta—W. B. RIDER, Forest Supervisor, Sisson (P-WF); PHILIP T. HARRIS, Deputy Forest Supervisor.

Sierra—C. H. SHINN, Forest Supervisor, Northfork (WU via Fresno-WF); H. J. TOMPKINS, Forest Assistant; WM. G. HOWARD, Forest Assistant.

Stanislaus—R. W. AYRES, Forest Supervisor, Sonora (WU-WF); D. N. ROGERS, Forest Assistant.

Tahoe—R. L. P. BIGELOW, Forest Supervisor, Nevada City (WU-WF); M. B. PRATT, Deputy Forest Supervisor.

Trinity—F. H. HAFLEY, Forest Supervisor, Weaverville (WU-WF); W. A. HUESTIS, Deputy Forest Supervisor.

NEVADA

Inyo—See California.

Mono—J. C. WELLS, Forest Supervisor, Gardnerville (WU-WF).

Tahoe—See California.

DISTRICT 6

Washington, Oregon, and Alaska.

Office, Beck Building, Portland, Oreg.

E. T. ALLEN, District Forester.

GEO. H. CECIL, Assistant District Forester.

C. R. PIERCE, District Law Officer.

OPERATION

C. H. FLORY, Chief.

C. J. BUCK, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, A. H. COUSINS, District Fiscal Agent.

Maintenance, SHIRLEY BUCK.

SILVICULTURE

F. E. AMES, Chief.

C. S. JUDD, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Supervision of timber sales and scaling, Oregon National Forest—W. T. ANDREWS, Lumberman, Portland, Oreg.

Supervision of timber sales and scaling, Olympic National Forest—J. P. HUGHES, Lumberman, Olympia, Wash.

Scaling on Wind River Lumber Company timber sale, May 10, 1906, Columbia National Forest—EDWIN C. ERICKSON and D. L. MCKAY, Jr., Scalpers, Carson, Wash.

Cooperation with Indian Office in supervision of cutting, Klamath Indian Reservation—T. F. KELSOE, Assistant Forest Ranger, Klamath Agency, Oreg.

Planting, J. F. KÜMMEL.

Silvics, T. T. MUNGER.

PROJECT

Study of silvical qualities and growth of Douglas fir—T. T. MUNGER, Forest Assistant, Portland, Oreg.

GRAZING

HOWARD K. O'BRIEN, Chief.

T. P. MACKENZIE, Assistant Chief.

PRODUCTS

J. B. KNAPP, in Charge.

PROJECTS

Timber Tests—

Testing laboratory in cooperation with the University of Washington, Seattle, Wash.—O. P. M. Goss in charge; Assistant, P. S. BUHL:

Selection of material for tests on fire-killed Douglas fir—H. B. OAKLEAF and C. B. COX, Portland;

Tests of western larch in cooperation with the University of Washington and the Western Pine Manufacturers' Association;

Supervision of the Forest Service timber-testing exhibit at the Alaska-Yukon-Pacific Exposition.

Wood Preservation—

Study of preservative processes used by commercial treating plants in Oregon and Washington—H. B. OAKLEAF, Portland.

Inspection of Northern Pacific Test Track in cooperation with District 1—H. B. OAKLEAF, Portland.

Wood Utilization—

Study of wood-using industries and markets for forest products—J. B. KNAPP, Portland.

Study of the rate of deterioration and the usability of fire-killed timber—C. B. COX, Portland.

NATIONAL FORESTS

ALASKA

Chugach—W. A. LANGILLE, Forest Supervisor, Ketchikan (SC, U. S. A., WU-AP); HOWARD M. CONRAD, Deputy Forest Supervisor; LAGE WERNSTEDT, Forest Assistant.

Tongass—W. A. LANGILLE, Forest Supervisor, Ketchikan (SC, U. S. A., WU-AP); HOWARD M. CONRAD, Deputy Forest Supervisor; LAGE WERNSTEDT, Forest Assistant.

CALIFORNIA

Crater—See Oregon.

Siskiyou—See Oregon.

OREGON

Cascade—C. R. SEITZ, Forest Supervisor, Eugene (WU, P-WF); J. R. HARVEY, Deputy Forest Supervisor; E. B. STARR, Forest Assistant.

Crater—M. L. ERICKSON, Forest Supervisor, Medford (WU, P-WF); S. S. SWENNING, Deputy Forest Supervisor; H. D. FOSTER, Forest Assistant.

Deschutes—A. S. IRELAND, Forest Supervisor, Prineville (PT & T-WF, via Shaniko).

Fremont—GUY M. INGRAM, Forest Supervisor, Lakeview (WU via Klamath Falls-WF); G. D. BROWN, Deputy Forest Supervisor.

Malheur—CY. J. BINGHAM, Forest Supervisor, John Day (WU via Baker City-WF via Baker City).

Oregon—T. H. SIERRARD, Forest Supervisor, Portland (WU, P-WF, N, P); RALPH S. SHELLEY, Deputy Forest Supervisor.

Siskiyou—M. J. ANDERSON, Forest Supervisor, Grants Pass (WU, P-WF); HUGH M. GUTHRIE, Deputy Forest Supervisor; H. HAEFNER, Forest Assistant.

Siuslaw—A. E. COHOON, Forest Supervisor, Eugene (WU, P-WF).

Umatilla—THOS. E. CHIDSEY, Forest Supervisor, Heppner (WU-P).

Umpqua—S. C. BARTRUM, Forest Supervisor, Roseburg (WU, P-WF); H. M. HALE, Deputy Forest Supervisor.

Wallowa—HARVEY W. HARRIS, Acting Forest Supervisor, Wallowa (WU-P).

Wenaha—See Washington.

Whitman—HENRY IRELAND, Forest Supervisor, Sumpter (WU via Baker City-WF via Baker City).

WASHINGTON

Chelan—GEORGE W. MILHAM, Forest Supervisor, Chelan (PT & T-GN via Wenatchee); D. S. RICE, Deputy Forest Supervisor.

Columbia—H. O. STABLER, Forest Supervisor, Portland, Oreg. (WU, P-WF, N, P); ARTHUR R. WILCOX, Forest Assistant.

Colville—W. W. CRYDER, Forest Supervisor, Republic (WU, P-GN).

Olympic—FRED HANSON, Forest Supervisor, Olympia (WU-GN, N).

Rainier—G. F. ALLEN, Forest Supervisor, Orting (WU-N); F. B. KELLOGG, Forest Assistant.

Snoqualmie—B. P. KIRKLAND, Forest Supervisor, Seattle (WU, P-N, GN, WF); E. T. CLARK, Forest Assistant.

Washington—C. H. PARK, Acting Forest Supervisor, Bellingham (WU, P-GN, N.).
Wenaha—J. M. SCHMITZ, Forest Supervisor, Walla Walla (WU-N, P).
Wenatchee—A. H. SYLVESTER, Forest Supervisor, Leavenworth (WU-GN); A. A. PARKER, Deputy Forest Supervisor; FRED W. CLEATOR, Forest Assistant.

SERVICE CHANGES IN JUNE

APPOINTED

Forester—

A. W. MALTBY, Expert.

Silviculture—

FEDERAL COOPERATION: PATRICK KENNEDY, Lumberman.

District 4—

OCCUPANCY: F. F. HINTZE, Forest Agent; JAMES F. HOYT, Forest Agent.

PROMOTED

District 4—

ORGANIZATION: CHARLES F. PATTERSON, Forest Ranger to Deputy Forest Supervisor.

REINSTATED

Products—

WOOD PRESERVATION: CHAS. A. SCOTT, Forest Assistant.

District 4—

ORGANIZATION: HORACE F. STUDLEY, Deputy Forest Supervisor, Uinta National Forest; CHARLES L. SMITH, Supervisor, Fishlake National Forest.

RESTORED TO ROLLS WITH PAY

Silviculture—

STATE AND PRIVATE COOPERATION: WALTER M. MOORE, Forest Assistant.

District 4—

SILVICULTURE: NILS B. ECKBO, Forest Agent.

FURLOUGHED

Forester—

INSPECTION: D. D. BRONSON, General Inspector.

Grazing—

W. C. CLOS, Inspector.

TRANSFERRED

District 3—

OPERATION: R. G. WILLSON, from Assistant Chief of Operation to Forest Supervisor Tonto National Forest; W. R. MATTOON, from Forest Examiner in Charge of Section of Silvics to Forest Supervisor Manzano National Forest; A. D. READ, from Forest Supervisor Manzano National Forest to Forest Supervisor Zuni National Forest; A. S. PECK, from Forest Examiner in Charge of Section of Planting to Assistant Chief of Operation.

District 4—

SILVICULTURE: A. E. OMAN, Forest Assistant, Branch of Silviculture, Washington, D. C., to Weiser National Forest.

SEPARATED**Silviculture—**

SILVICS: ANTOIN T. BOISEN, Forest Assistant.

Grazing—

IVAR TIDESTROM, Scientific Assistant.

District 2—

ORGANIZATION: WILLIAM L. WALTER, Forest Ranger, Holy Cross National Forest;
ARTHUR L. LYNN, Deputy Supervisor, Black Hills National Forest.

TERMINATED**District 2—**

ORGANIZATION: JOHN H. McDONALD, Land Law Clerk, District Office.

DISMISSED**District 1—**

ORGANIZATION: R. W. STUART, Forest Supervisor, Jefferson National Forest.

With profound regret, announcement is made of the death, on June 16, of Col. William Freeman Fox, a collaborator of the Forest Service, and, until June 1, 1909, superintendent of State forests, New York Forest, Fish and Game Commission. Colonel Fox was born on January 11, 1840, at Ballston Spa, N. Y., and served with great credit through the civil war. Later he traveled extensively in Europe, studying forest conditions and the different systems of forest management, and in 1886 entered the service of the State of New York. To Colonel Fox's aggressiveness and foresight is due in large measure the present forest policy of the State. As a collaborator of the Forest Service he rendered important aid to the Government. Colonel Fox was an associate member of the Society of American Foresters and the author of a number of books on the forests of New York.

It is with regret that the Service announces the death, on June 20, of Forest Ranger Eugene B. Courtney by drowning in Clarks Fork River, Idaho.

SERVICE NOTES FOR JULY

These notes contain instructions and necessary information for Forest officers, and will, therefore, be carefully read and kept on file for reference.

OFFICE OF THE FORESTER

In the Absence of a District Forester—

The Manual of Procedure, page 30, is hereby amended by adding the following sentence to the paragraph under "Office of the District Forester: Duties:"

In the absence of the District Forester the Assistant District Forester will perform the duties and sign papers as Acting District Forester: *Provided*, That in case of emergency during the absence of both District Forester and Assistant District Forester, the District Forester may designate a Chief of Office who will perform the duties and sign papers as Acting District Forester.

LAW

Amendment of Manual of Procedure: Law Report—

The Manual of Procedure, page 81, is amended to read as follows:

Law (monthly).—A brief statement of new legal questions of importance arising or likely to arise in the District, and a brief report of progress. The report should give separately the total number of cases in each of the following classes:

Pending claims cases not yet acted upon by the District Forester; probable court cases not yet acted upon by the District Forester; claims cases pending before local land office; cases pending in the courts; cases decided by local land officers—(a) for the United States, (b) against the United States; cases decided by the courts—(a) for the United States, (b) against the United States.

Claims: Final-Proof Hearings—

In a recent case where the register and receiver refused to allow a Forest Service officer to cross-examine witnesses at a final-proof hearing, the Commissioner of the General Land Office instructed the register and receiver that a Forest Service officer is a representative of the Government and should be permitted to interrogate claimants and witnesses offering final proof on entries within or near the boundaries of National Forests. Forest Service officers should not, however, introduce government witnesses at final-proof hearings. The Forest Service concurs with the view of the Department of the Interior that a claimant should be given notice of any charges made by the Government against his entry before adverse proceedings. Where notice has been received of intention to submit final proof, and it is believed that the claim is not in good faith or that its erroneous passage to patent would prejudice National Forest interests, the report upon the claim to the Chief of Field Division should be made as early as possible before final-proof hearing.

Claims Reports: Identification—

It is absolutely necessary for supervisors to place, on every claims report made in compliance with a request from the Commissioner of the General Land Office, a reference to the Commissioner's request, as, for example:—

In response to the Honorable Commissioner's (or Assistant or Acting Commissioner's) letter "C-5903, J. E. B.," dated June 18, 1909.

This reference should be placed at the top of the first page of the report and is necessary in order to identify the report with related papers in the files of the General Land Office. It is equally necessary for supervisors to place, on claims reports made after the receipt of notice to submit final proof, a reference to such notice and the date set for final proof. This reference should also be made at the top of the first page of the report. In all claims reports a complete correct description of the land must be given, together with the entry number, including the serial number of the local land office, when that is known.

No Report on Claims Made in Good Faith—

In compliance with a recent request from the Commissioner of the General Land Office, no report will be prepared or submitted to the chiefs of field divisions on claims where notices are received of intention to submit final proof and the Forest officers find that the claims are in good faith and that their passage to patent will not prejudice National Forest interests. In such cases the duplicate notices of intention to submit final proof will be returned to the Chief of Field Division with the indorsement, "Patent will not prejudice National Forest interests." This instruction does not affect any cases outside the class described in the first sentence of this note.

Forest Homesteads: Second Entries—

Attention is called to the apparent error in the second paragraph in the instructions on page 42 of The Use Book. The paragraph as worded implies that, if a homestead entry were made prior to February 8, 1908, and relinquished at any time subsequent to that date, the entryman would be entitled to a second entry. Under the provisions of the act, however, it is necessary that the entry must have been lost, forfeited, or abandoned prior to February 8, 1908. There is at present no provision of law by which a person who has abandoned or relinquished his claim since February 8, 1908, is authorized to make a second entry.

OPERATION**Care in Ordering Forest Officers' Uniforms—**

It has been reported to the Forester that persons not connected with the Service are wearing uniforms identical with that adopted for the use of Forest officers. Section 5 of the contract with the manufacturers provides that Forest officers shall give their orders for such uniforms through the supervisors under whom they are serving. Orders upon the manufacturers must be written upon letter paper of the Forest Service and certified by the supervisor over his official title. Very great care must be taken by supervisors and all Forest officers to guard against such orders upon the manufacturers falling in the hands of unauthorized persons.

Unnecessary Explanations Written on Vouchers—

Special attention is called to the unnecessary explanations that are noted on reimbursement accounts and subvouchers. Members are requested to state accounts and subvouchers showing *only* the actual transaction. The items should be brief

and definite and meet the requirements of the Fiscal Regulations. Whenever the expenditures are of an unusual character, or for any reason an explanation is necessary, a signed memorandum should accompany the voucher.

Correction Ink for Forest Atlas—

Corrections may be made upon Forest Atlas Folio sheets with orange ink, but the ordinary orange ink will not give the best results in photographic work, nor can it be removed with the ink eradicator. It is more satisfactory to use an ink made of 5 parts of Pomeroy's yellow and 1 part of Carter's crimson writing fluid. This will photograph well and may be eradicated if changes become necessary. The Property Clerk will fill requisitions for this mixture, which will be known as "Correction Ink for Forest Atlas."

Dating of Maps and Papers—

Service Order 26, of February 15, 1909, regarding the dating of maps and papers, applies not only to those prepared in the Forest Service but also to those received by the Service. Care must be taken in all offices, particularly offices of supervisors, that maps and other papers be separately stamped with the date of receipt, in addition to stamping the letters transmitting them. In applications for rights of way for commercial power plants and other uses of Forest lands and resources the question of priority often hinges on the time of receipt, and serious embarrassment in establishing priority rights is caused by the lack of this information.

SILVICULTURE

Timber Trespass: Proposition to Settle—

On the proposition of settlement, Form 653 (revised Dec., 1908), it is deemed advisable, in order to avoid confusion, for the supervisor, when furnishing the proponent with this form, to fill out the amount of timber cut in trespass and its value in its several conditions, leaving blank on the first page all of the space below the words: "Legal conclusions must be avoided." In this space the proponent should give, in his own language, his own statement of the main facts concerning the trespass.

Seed Production Report on Form 977—

The reports on seed crops of forest trees, Form 977, are due at the Office of the District Forester July 20. These reports should be prepared carefully for each Forest and submitted promptly in order that the most convenient arrangements may be made for cheap seed collecting. In many instances last season these reports were not made by technical men assigned to the Forest, but almost entirely by rangers. Supervisors should have all Forest officers, especially technical men, report on such portions of the Forest as they have had occasion to examine. In the space for remarks there should be noted the abundance or scarcity of trees of the species enumerated. District Foresters desiring seed from other districts should inform the District Forester concerned not later than the date named above.

GRAZING

Record of Grazing Permits—

A card record of each approved application for grazing during a period within any one grazing year will be made on Form 621. The card will be filed alphabetically and used as an index to the regular files. When payment of the grazing fee is made, the date of the notification of receipt and the amount paid will be entered on the

card. Permits will not be issued for a number of stock in excess of that upon which the fees have been paid. When the permit is issued, its date will be entered upon the card. When a refund is made, the date of the voucher and the amount refunded will be noted on the card. Upon receipt of notice that the applicant does not intend to pay the fees or accept the permit, or, when there is reason for not issuing the permit after the application has been approved, the case will be closed and the card marked "canceled." The same serial number will not be used in any other case. At the expiration of the current grazing year the card records will be transferred to a closed file. When an application is approved for grazing during a term of years, it will be recorded on Form 256, and the card will be transferred to the current files from year to year until the case is closed.

Authority for Issuance of Use Permits—

The changes in routine made by Service Order 28 do not in any way affect the authority of Forest supervisors regarding the issuance of special-use permits. When an application is received for a pasture of more than 320 acres in area, or for any other special use not authorized by the regulations, if the circumstances appear to warrant such action, such application should be referred to the District Forester, with a recommendation that its approval be authorized. Upon approval, the permit may be issued in accordance with his instructions.

Renewal of Permits to Purchasers of Stock—

In addition to the instructions issued in the Field Program for May, 1909, the following restriction in the renewal of permits to purchasers of stock will be made:

No division of grazing privilege will be allowed in the renewal of a permit when the number of stock sold is equal to or less than the protective limit. In case the number of stock sold exceeds the protective limit, a division of the permit among different owners may be allowed, provided that not more than one new owner is allowed a renewal of permit for less than the protective limit number of stock.

Form for Waiver of Grazing Privileges—

A new form (No. 763, Waiver of grazing privileges) has been prepared and can be obtained from the Supply Depot at Ogden on requisition. This form is intended for use as a waiver of grazing privileges when stock is sold by a permittee with the understanding that the purchaser will apply for a permit on them the following year.

Time for Notifying a Trespasser—

Supervisors are requested to handle grazing-trespass cases in accordance with the instructions in the December Field Program and in the Circular of Instructions Regarding Grazing Trespass, dated May 15, 1909. Many cases are coming in in which the supervisor has fixed the amount of damages assessed and notified the trespasser before the case has been reviewed by the District Forester.

General Rule for the Survey of Pastures—

It is not necessary that pastures be surveyed as accurately as administrative sites or Forest homesteads are; but in order to inspect this class of special uses properly, which is required by Service Order No. 28, a fairly accurate description is necessary. Wherever possible, this description should be by legal subdivisions, but if this is not practicable, a description by courses and approximate distances, sufficiently accurate to determine the acreage and location, should be given in the permit. It will not be necessary, in the majority of cases, to chain the boundaries, since, for all

practical purposes, the distances may be determined by pacing. In any case the compass bearing of each line of the boundary should be determined and a stake or other monument should be set at each corner and marked so that the area inclosed by the permittee may be checked at any time. If a stake is used it should be firmly driven in the ground and marked with the marking hatchet. When the survey is completed it may be tied to a section corner, if one is convenient, or to a prominent topographical feature, such as the forks of a stream or the apex of a hill.

SERVICE PUBLICATIONS ISSUED IN JUNE

- Circular 165—Practical Assistance to Owners of Forest Land and to Tree Planters.
Silvical Leaflet 48—Pignut Hickory.
Silvical Leaflet 49—Shagbark Hickory.

SERVICE ORDERS

SERVICE ORDER 30

JUNE 23, 1909

FREIGHT AND EXPRESS CHARGES.

(Supplements sec. 145 of the Green Book as revised in Service Order No. 27.)

Beginning July 1, 1909, freight and express will be charged against individual letters of authorization to Supervisors, Chiefs of Maintenance, the Property Clerk, the Purchasing Agent, and other members of the Service, instead of against a special allotment for freight and express, as heretofore.

Freight shipments should always be made upon a Department bill of lading. The charge must be ascertained when the shipment is forwarded, and entered upon the memorandum bill of lading (Form M). The charge will then be recorded in precisely the same manner as the coupon of a transportation request. Form M will be sent immediately to the District Fiscal Agent, who will enter it upon Form 17 (Treasury settlement sheet), and forward the Form M to the Forester. (This waives instructions in Paragraph 5 on the back of the bill of lading, Form L.) The District Fiscal Agent will be notified through the Forester of the amount actually paid by the Treasury. If the amount paid differs from the amount entered upon Form M, the District Fiscal Agent, after making the proper entries, will notify the member concerned, who in turn will make the necessary correction upon his records.

The charges for express shipments will be paid when practicable by the member concerned, and included in his reimbursement account for the month, supported by the regular receipt from the company showing rate, weight, starting point, and destination. When the amount is \$5 or more, the shipment will be made on Department bill of lading under the procedure outlined for shipments by freight.

When shipment by freight or express is on account of permanent improvement or cooperative work, the charge should be paid from these appropriations.

OVERTON W. PRICE, *Associate Forester.*

SERVICE ORDER 31

JUNE 25, 1909.

RECAPITULATION ACCOMPANYING VOUCHERS, FORM 99

Forms 99 accompanying vouchers for the fiscal year 1910 will not give the analysis of Forest disbursements. The charges against individual improvement projects will also be discontinued. The total amount chargeable to each Forest allotment, including fire, and the total amount of the voucher will be entered as hitherto in the spaces provided at the foot of columns A, B, C, and D.

OVERTON W. PRICE, *Associate Forester.*

SERVICE ORDER 32

JUNE 25, 1909.

ANALYSIS OF FOREST DISBURSEMENTS, FORM 22.

Form 22 will not be kept for the fiscal year 1910. This amends the instructions under "Analysis of Forest Disbursements," Manual of Procedure, page 55. Until further orders supervisors will continue to keep the analysis of disbursements in the Forest Journal of Expenses. Form 22 will be continued for the fiscal year 1909 until all charges against the appropriation for that year have been settled.

OVERTON W. PRICE, *Associate Forester.*



UNITED STATES DEPARTMENT OF AGRICULTURE,
FOREST SERVICE

GIFFORD PINCHOT, Forester

August Field Program

1909

This program of field work and assignments in the Forest Service is issued on the first day of each month and is for the exclusive use of members of the Service and cooperating bureaus. The names of members whose assignments are not yet fixed and reference to projects for which plans have not been matured are necessarily omitted. All orders and other instructions printed in the Field Program will apply to all Districts.

It is requested that the members of the Forest Service cooperate in making this program complete and accurate.

Unless the address of a member is given in this program or is definitely known, he should be addressed in care of the Forest Service, Washington, D. C.

FIELD PROGRAM FOR AUGUST, 1909

OFFICE OF THE FORESTER

GIFFORD PINCHOT, Forester.

OVERTON W. PRICE, Associate Forester.

HARRY L. HILL, Secretary to the Forester.

P. P. WELLS, Law Officer.

A. C. SHAW, Assistant Law Officer.

HERBERT A. SMITH, Editor.

FINDLEY BURNS, in charge of Publication.

RAYMOND W. PULLMAN, in charge of Information.

GEORGE B. SUDWORTH, Dendrologist.

R. S. KELLOGG, Assistant Forester, engaged upon Forest Statistics.

EUGENE S. BRUCE, Expert Lumberman.

D. D. BRONSON, {
R. E. BENEDICT, } General Inspectors.

E. M. GRIFFITH, Special Inspector for Indian Reservations in Wisconsin, Madison, Wis.

OPERATION

JAMES B. ADAMS, Assistant Forester, in Charge.

CHAS. S. CHAPMAN, Assistant Forester.

GEORGE G. ANDERSON, Assistant in Office Methods.

ACCOUNTS

H. B. CRAMER, Fiscal Agent.

E. A. MELZAR, District Fiscal Agent.

GEOGRAPHY

F. G. PLUMMER, Chief.

Atlas, G. B. BRUCE, Acting.

Drafting, C. A. KOLB.

Alienation, J. B. SATTERLEE.

Photography, A. G. VARELA.

MAINTENANCE

GEORGE A. BENTLEY, Chief.

SILVICULTURE

WILLIAM T. COX, Assistant Forester, in Charge.

E. E. CARTER, Assistant Forester (in the Field).

STATE AND PRIVATE COOPERATION

J. G. PETERS, Chief (in the Field).

J. H. FOSTER, Acting Chief.

PROJECTS

Alabama—

Preparation of a working-plan report for the Tennessee Coal, Iron and Railroad Company—E. D. CLARK and G. T. BACKUS, Washington, D. C.

Eastern States—

General inspection of experiments in nursery and planting work, in cooperation with different States—E. O. SIECKE and W. M. MOORE, Washington, D. C.

Kentucky—

Study of forest conditions in cooperation with State Board of Agriculture, Forestry, and Immigration—R. C. HALL, W. H. VON BAYER, J. M. BRISCOE, and O. D. INGALL, Franklin.

North Carolina—

Study of forest conditions, in cooperation with North Carolina Geological and Economic Survey—J. S. HOLMES, W. B. WILLEY, and A. W. WILLIAMSON, Chapel Hill.

Virginia—

Preliminary examination of forest conditions, in cooperation with the State—W. W. ASHE, Richmond.

SILVICS

RAPHAEL ZON, Chief.

PROJECTS

General—

Basket-willow study and seed testing and seed storage—N. H. GRUBB, Washington, D. C.

Northeastern States—

Study of northern hardwoods—E. H. FROTHINGHAM, Portland, Me.

Western States—

Location of insect-infested timber in the National Forests, with practical application of methods of insect control—W. D. EDMONSTON (detailed to the Bureau of Entomology under instructions from Dr. A. D. HOPKINS, in charge of forest-insect investigations), Colorado Springs, Colo.

Computing, E. A. ZIEGLER (in the Field).

Library, Miss H. E. STOCKBRIDGE.

GRAZING

A. F. POTTER, Assistant Forester (in the Field).

L. F. KNEIPP, Assistant Forester (in the Field).

WILL C. BARNES, Acting Assistant Forester (in Charge).

PROJECTS

Forage investigations; compilation of data—F. V. COVILLE, Botanist, Bureau of Plant Industry, in charge, Washington, D. C.; JAMES T. JARDINE, Deputy Forest Supervisor, Wallowa, Oreg., and ARTHUR T. SAMPSON, Plant Ecologist, Wallowa, Oreg.

Identification of grasses and plants—Dr. EDWARD L. GREENE, Consulting Expert, Washington, D. C.

PRODUCTS

WM. L. HALL, Assistant Forester, in Charge (in the Field).

McGARVEY CLINE, Assistant Forester.

WOOD PRESERVATION

HOWARD F. WEISS, in Charge.

JOHN M. NELSON, Jr., Assistant.

PROJECTS

Construction and experimental operation of a wood-preserving plant, in cooperation with the Alabama Wood Preserving Company—EDWARD H. FORD, Birmingham, Ala.

Experimental operation of a treating plant, in cooperation with the Indianapolis, Columbus and Southern Traction Company—C. P. WINSLOW, Columbus, Ind.

Experimental operation of a commercial nonpressure plant for the treatment of mine timbers, in cooperation with the Philadelphia and Reading Coal and Iron Company—J. M. NELSON, Jr., Washington, D. C.; assistant detailed by the company, L. W. Conrad, Pottsville, Pa.

Design and construction of apparatus for the prevention of sap stain and for a wood-preserving plant, in cooperation with the Great Southern Lumber Co.—E. W. PETERS, Washington, D. C.

Construction and experimental operation of a low-pressure wood-preserving plant, in cooperation with the War Department, Picatinny Arsenal—F. M. BOND, Dover, N. J.

Special field investigations into the design and operation of commercial timber-treating plants—C. T. BARNUM, Washington, D. C.

TIMBER TESTS

ROLF THELEN, in Charge.

PROJECTS

Correlation of file system and analysis of timber-test data—H. E. MCKENZIE and J. O. BIXBY.

Timber-testing laboratory, New Haven, Conn., in cooperation with Yale University—H. D. TIEMANN in charge; assistant, CORNELIUS BARRY; W. D. BRUSH, microscopist:

Study of the effect of drying on the strength and other properties of wood;

Study of the effect of drying on the absorption of water by wood;

Microscopic study of the mechanical failure of wood.

Timber-testing laboratory, Lafayette, Ind., in cooperation with Purdue University—W. K. HATT in charge; assistants, J. A. NEWLIN, A. K. ARMSTRONG, A. D. VOLFF, Jr., H. V. BLANK, THOMAS LYONS, and HARRY WEYLS:

Study of the effect of creosoting on the strength of southern pine, in cooperation with the Illinois Central Railway;

Study of the physical and mechanical properties of several species of hickory, in cooperation with the National Hickory Association;

Study of the physical and mechanical properties of red oak cross-ties treated by various preservative processes, in cooperation with the American Railway Engineering and Maintenance of Way Association.

WOOD CHEMISTRY

H. S. BRISTOL, in Charge.

H. E. SURFACE, Assistant.

PROJECTS

Study of methods of wood distillation and for the standardization and grading of turpentine—L. F. HAWLEY; assistant, F. E. LICHTENTHAELER, both at Madison, Wis.

Experiments with various woods for paper pulp—E. SUTERMEISTER; assistant, J. L. MERRILL, both at Washington, D. C.

Study of wood preservatives and of chemical problems in wood utilization—E. BATEMAN; assistant, C. F. SPEH, both at Washington, D. C.

WOOD UTILIZATION

II. S. SACKETT, in Charge.

PROJECTS

Study of the wood-using industries in Illinois in cooperation with the State Laboratory of Natural History—FRANKLIN H. SMITH, 1418 Fisher Building, Chicago.

Study of the wood-using industries in Kentucky in cooperation with the State Board of Agriculture, Forestry, and Immigration—II. S. SACKETT, Washington, D. C.

Study of the wood-using industries of Massachusetts in cooperation with F. W. Rane, State Forester, State House, Boston, Mass.—H. S. SACKETT, Washington, D. C.

Study of the wood-using industries of North Carolina in cooperation with the North Carolina Geological Survey—HU MAXWELL, Washington, D. C.

Collection of wholesale lumber prices in the markets and f. o. b. mill prices—FRANKLIN H. SMITH, 1418 Fisher Building, Chicago, Ill.

Preparation of reports upon the uses of the principal commercial woods—HU MAXWELL, Washington, D. C.

DISTRICTS

DISTRICT 1

Montana, northeastern Washington, northern Idaho, northwestern South Dakota, northern Michigan, northern Minnesota, and southwestern North Dakota.

Office, Hammond Block, Missoula, Mont.

W. B. GREELEY, District Forester.

F. A. SILCOX, Assistant District Forester.

W. M. AIKEN, District Law Officer.

E. B. QUIGGLE, Assistant District Law Officer.

OPERATION

R. H. RUTLEDGE, Chief.

R. Y. STUART, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, **H. I. LOVING**, District Fiscal Agent.

Maintenance, **R. L. CAMPBELL**.

SILVICULTURE

A. W. COOPER, Chief.

D. T. MASON, Assistant Chief (in the Field).

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Idaho—

Preparation of yield tables, Coeur d'Alene National Forest—**F. I. ROCKWELL**, Wallace.

Check scaling, Coeur d'Alene National Forest—**G. L. COTT**, Wallace.

Montana—

Estimate of timber, with classification and appraisal of land, on Northern Pacific Railway sections in cooperation with the railway—**KARL W. WOODWARD**, Missoula; Deerlodge and Helena National Forests, **W. B. PIPER**, Boulder; Absaroka National Forest, **N. C. BROWN**, Livingston; Jefferson National Forest, **R. C. HAWLEY**, Great Falls; Blackfeet and Cabinet National Forests, **L. S. MURPHY**, Kalispell, Lolo and Missoula National Forests, **E. D. FLETCHER**, Missoula.

Planting, Chief and Assistant Chief of Silviculture.

PROJECTS

Inspection of Lolo National Forest in preparation of five-year planting plans and the location of an additional nursery—E. C. CLIFFORD, Bozeman, Mont.

Work on the Boulder Nursery—G. B. McDONALD, Boulder, Mont.

Silvics, Chief and Assistant Chief of Silviculture.

PROJECT

Collection of data for a yellow pine volume table, Bitterroot National Forest—E. I. TERRY, Darby, Mont.

GRAZING

C. H. ADAMS, Chief (in the Field).

W. S. PERRINE, Assistant Chief.

PRODUCTS

PROJECTS

Wood Preservation—

Construction and experimental operation of a wood-preserving plant for treating fence posts and other ranch timbers, in cooperation with the Bitter Root Stock Farm—P. R. HICKS, Missoula, Mont.

Preliminary report on and preparation of plans for a treating plant, in cooperation with the Anaconda Copper Mining Co.—P. R. HICKS, Missoula, Mont.

NATIONAL FORESTS

IDAHO

Beaverhead—See Montana.

Clearwater—F. A. FENN, Forest Supervisor, Kooskia (WU-N).

Coeur d'Alene—W. G. WEIGLE, Forest Supervisor, Wallace (WU-N); E. R. BRUNKE, Deputy Forest Supervisor; F. I. ROCKWELL and WM. W. MORRIS, Forest Assistants.

Kaniksu—See Washington.

Nezperce—GEO. V. RING, Forest Supervisor, Grangeville (WU-N).

Pend Oreille—J. E. BARTON, Forest Supervisor, Sandpoint (W-UN, W); C. H. WILCOX, Forest Assistant.

MICHIGAN

Marquette }
Michigan }—Not under administration.

MINNESOTA

Minnesota—G. E. MARSHALL, Forest Supervisor, Cass Lake (WU-GN).

Superior—J. S. BAIRD, Acting Forest Supervisor, Ely (WU-GN).

MONTANA

- Absaroka**—V. GIFFORD LANTRY, Forest Supervisor, Livingston (WU-N); J. A. FITZWATER, Forest Assistant.
- Beartooth**—J. F. PRESTON, Acting Forest Supervisor, Red Lodge (WU-N).
- Beaverhead**—C. K. WYMAN, Forest Supervisor, Dillon (WU-P); R. J. MOORE, Deputy Forest Supervisor; ROBERT SIMMONS, Forest Assistant.
- Bitterroot**—W. W. WHITE, Forest Supervisor, Missoula (WU-N); M. N. STICKNEY, Forest Assistant.
- Blackfeet**—F. N. HAINES, Forest Supervisor, Kalispell (WU-GN); R. P. McLAUGHLIN, Deputy Forest Supervisor.
- Cabinet**—RALPH H. BUSHNELL, Acting Forest Supervisor, Thompson Falls (WU-N); C. N. WHITNEY, Forest Assistant.
- Custer**—GLEN A. SMITH, Acting Forest Supervisor, Ashland (WU via Forsyth-N via Forsyth).
- Deerlodge**—C. C. HALL, Forest Supervisor, Anaconda (P-N); F. S. PATTON, Forest Assistant.
- Flathead**—PAGE S. BUNKER, Forest Supervisor, Kalispell (WU-GN).
- Gallatin**—D. T. CONKLING, Forest Supervisor, Bozeman (WU-N); A. A. SAUNDERS, Forest Assistant.
- Helena**—DWIGHT BUSHNELL, Forest Supervisor, Helena (WU-N); J. D. WARNER, Deputy Forest Supervisor.
- Jefferson**—J. B. SEELY, Forest Supervisor, Great Falls (WU-N); HENRY FARQUHAR, Forest Assistant.
- Kootenai**—DORR SKEELS, Acting Forest Supervisor, Libby (WU-GN); RUTLEDGE PARKER, Forest Assistant.
- Lewis and Clark**—W. H. DAUGS, Forest Supervisor, Chouteau (WU via Collins-GN via Collins).
- Lolo**—ELERS KOCH, Forest Supervisor, Missoula (WU, P-N); THOS. C. SPAULDING, Forest Assistant.
- Madison**—CLIFTON W. HUDSON, Acting Forest Supervisor, Sheridan (WU-N); JOS. W. BUTLER, Forest Assistant.
- Missoula**—D. G. KINNEY, Forest Supervisor, Missoula (WU, P-N); RUSSELL G. POND, Deputy Forest Supervisor.
- Sioux**—See South Dakota.

NORTH DAKOTA

- Dakota**—C. A. BALLINGER, Forest Supervisor, Camp Crook, S. Dak. (WU via Belle Fourche-Am via Belle Fourche).

SOUTH DAKOTA

- Sioux**—C. A. BALLINGER, Forest Supervisor, Camp Crook (WU via Belle Fourche-Am via Belle Fourche).

WASHINGTON

- Kaniksu**—W. N. MILLAR, Acting Forest Supervisor, Newport (WU-GN); WM. C. LATANE, Forest Assistant.

DISTRICT 2

Colorado, Wyoming, South Dakota, Nebraska, and western Kansas.

Office, Majestic Building, Denver, Colo.

SMITH RILEY, District Forester.

P. G. REDINGTON, Assistant District Forester.

J. M. CATES, District Law Officer.

J. F. LAWSON, Assistant District Law Officer.

OPERATION

FRED W. MORRELL, Chief.

C. J. STAHL, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, **JOHN A. URBANOWICZ**, District Fiscal Agent.

Maintenance, **F. B. AGEE**.

SILVICULTURE

A. K. CHITTENDEN, Chief.

S. L. MOORE, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Colorado—

Reconnaissance work, Leadville National Forest—**J. BENTLEY Jr.**, Breckenridge; assistants, **J. E. ELLIOTT**, Lumberman, **E. C. BUNKER**, **R. H. THOMPSON**, and **W. L. BARKER**.

Special timber sale work, Montezuma National Forest—**W. R. MCKINNON**, Lumberman, Mancos.

South Dakota—

Pine Ridge and Rosebud Indian Reservations—**LOUIS KNOWLES**, Forest officer in charge of the timber work, Pineridge.

Wyoming—

Special timber sale work, Cheyenne National Forest—**G. P. GREGG**, Lumberman, and **R. W. ALLEN**, Laramie.

Planting, **L. C. MILLER**.

PROJECT

Colorado—

Preparation of five-year plans for planting and sowing for the Battlement National Forest—**R. G. PIERCE**, Collbran.

Silvics, C. G. BATES.

PROJECTS

Colorado—

Special silvical studies—Dr. F. E. CLEMENTS, Delta; assistant, A. G. HAMEL.

Wyoming—

Study of lodgepole pine cutting systems—C. G. BATES, Laramie; assistants, D. E. FINKBINER and H. K. RUPP.

GRAZING

J. W. NELSON, Chief.

E. N. KAVANAGH, Assistant Chief.

PRODUCTS

C. L. HILL, in Charge.

PROJECTS

Timber Tests—

Timber-testing laboratory in cooperation with the University of Colorado, Boulder, Colo.—A. L. HEIM in charge; assistant, T. W. VENEMANN:

Tests on round timbers of various Rocky Mountain species, including mine timbers, in cooperation with the Northern Coal and Coke Company and various National Forests.

Tests on western red cedar, lodgepole pine, and Engelmann spruce telephone poles in cooperation with the South Platte Power Company, Central Colorado Power Company, and the Colorado Telephone Company.

Tests on western yellow pine and Colorado Douglas fir cross-ties in cooperation with the Denver, Boulder and Western Railway Company.

Tests on trestle timbers in cooperation with the Denver City Tramway Company.

Wood Preservation—

Preservative treatment of telephone poles in cooperation with the Colorado Telephone Company—D. L. CARMODY, Norrie, Colo.

Preservative treatment of telephone poles in cooperation with Robert Reed—D. L. CARMODY, Norrie, Colo.

Operation of National Forest treating plant for the Routt National Forest, treating drift-fence posts and telephone poles, and cooperation with ranchmen in treatment of fence posts—HARRY MILLS MASON, Jr., Steamboat Springs, Colo.

Wood Utilization—

Study of wood-using industries—H. B. HOLROYD, Denver, Colo.

NATIONAL FORESTS

COLORADO

Arapaho—C. G. POOLE, Forest Supervisor, Sulphur Springs (WU-Ad); LEE E. COOPER, Deputy Forest Supervisor; G. W. HENDRY, Forest Assistant.

Battlement—DAVID ANDERSON, Forest Supervisor, Collbran (WU-WF, G); JOHN W. LOWELL, Jr., Deputy Forest Supervisor.

- Cochetopa**—EUGENE WILLIAMS, Forest Supervisor, Saguache (WU-G).
- Gunnison**—WM. R. KREUTZER, Forest Supervisor, Gunnison (WU-WF, G); E. C. BERKY, Deputy Forest Supervisor.
- Hayden**—See Wyoming.
- Holy Cross**—HARRY H. FRENCH, Forest Supervisor, Glenwood Springs (WU-WF, G); ALBERT H. MILLER, Deputy Forest Supervisor.
- La Sal**—See Utah.
- Las Animas**—C. A. WHITNEY, Acting Forest Supervisor, La Veta (WU-G).
- Leadville**—A. L. STROUP, Forest Supervisor, Leadville (WU, P-WF, G); J. E. MARTIN, Forest Assistant.
- Medicine Bow**—H. N. WHEELER, Forest Supervisor, Fort Collins (WU-WF).
- Montezuma**—RESS PHILLIPS, Forest Supervisor, Mancos (WU-G); FRANK TOMPKINS, Deputy Forest Supervisor.
- Pike**—C. W. FITZGERALD, Forest Supervisor, Denver (WU, P-Ad, G, P, US, WF); C. M. GRANGER, Deputy Forest Supervisor; Monument Nursery—W. SCHRADER, Forest Planting Assistant, Monument.
- Rio Grande**—W. J. MORRILL, Acting Forest Supervisor, Monte Vista (WU-G); WALTER F. BOWERS, Deputy Forest Supervisor; P. T. COOLIDGE, Forest Assistant.
- Routt**—J. H. RATLIFF, Forest Supervisor, Steamboat Springs (WU-Ad); C. A. SOMMERS, Deputy Forest Supervisor; P. J. PAXTON, Forest Assistant.
- San Isabel**—J. N. LANGWORTHY, Forest Supervisor, Westcliffe (WU-G); THEODORE SHOEMAKER, Jr., Deputy Forest Supervisor.
- San Juan**—ERNEST W. SHAW, Forest Supervisor, Durango (WU-G); A. L. SWEITZER, Deputy Forest Supervisor; PETER KEPLINGER, Forest Assistant.
- Sopris**—JOHN McLAREN, Acting Forest Supervisor, Aspen (WU-WF, G); JAY HIGGINS, Forest Assistant.
- Uncompahgre**—HENRY L. SPENCER, Forest Supervisor, Delta (WU-G); HOWARD S. BUSHNELL, Deputy Forest Supervisor; J. H. RAMSKILL, Forest Assistant.
- White River**—JAMES A. BLAIR, Forest Supervisor, Meeker (WU-WF, G); ELMER E. STEPHENSON, Deputy Forest Supervisor.

KANSAS

- Kansas**—B. R. H. D'ALLEMAND, Forest Supervisor, Garden City (WU, P-WF); Garden City Nursery—C. R. TAYLOR, Forest Planting Assistant.

NEBRASKA

- Nebraska**—W. H. MAST, Forest Supervisor, Halsey (WU-Ad); H. R. SHOCKLEY, Deputy Forest Supervisor; Halsey Nursery—L. BESLEY and C. R. BECHTLE, Forest Planting Assistants.

SOUTH DAKOTA

- Black Hills**—PAUL D. KELLETER, Acting Forest Supervisor, Deadwood (WU-Ad, Am); JOHN MURDOCH, Jr., and G. A. DUTHIE, Forest Assistants.

WYOMING

- Bighorn**—W. E. JACKSON, Forest Supervisor, Sheridan (WU-Ad); HERBERT GRAFF, Deputy Forest Supervisor.
- Bonneville**—FOSTER STEELE, Acting Forest Supervisor, Pinedale (WU-P); H. EARLE FRENCH, Deputy Forest Supervisor.
- Cheyenne**—P. S. LOVEJOY, Forest Supervisor, Laramie (WU, P-P); JOHN W. STEPHENS, Deputy Forest Supervisor; R. A. STRETCH, Forest Assistant.
- Hayden**—JAMES BLACKHALL, Forest Supervisor, Encampment (WU, P-P); ARTHUR M. COOK, Deputy Forest Supervisor.
- Shoshone**—H. W. THURSTON, Forest Supervisor, Cody (WU-Ad).
- Sundance**—FRANK S. THOMSON, Acting Forest Supervisor, Sundance (WU-Ad, Am).

DISTRICT 3

Arizona, Arkansas, Florida, New Mexico, and Oklahoma.

Office, Strickler-Luna Building, Albuquerque, N. Mex.

A. C. RINGLAND, District Forester.

E. H. CLAPP, Assistant District Forester.

H. B. JAMISON, District Law Officer.

BLAKE FRANKLIN, Assistant District Law Officer.

OPERATION

A. O. WAHA, Chief.

A. S. PECK, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, J. J. DUFFY, District Fiscal Agent.

Maintenance, W. B. BUNTON.

SILVICULTURE

T. S. WOOLSEY, Jr., Chief.

A. B. RECKNAGEL, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Arizona—

Supervision of cutting, San Carlos Indian Reservation—J. J. WOOLSEY, San Carlos.

Reconnaissance of the Sitgreaves National Forest—D. W. ADAMS, in charge; Assistants, T. W. CARSCALLEN, REX KING, T. B. LONGWELL, and S. D. SMITH, Snowflake.

Marking timber on the Coconino National Forest—R. L. ROGERS, Flagstaff.

New Mexico—

Preparation of working plan report for Coconino National Forest—J. H. ALLISON, Albuquerque.

Reconnaissance of Pecos National Forest—I. F. ELDREDGE, in charge; Assistants, HARRY POOLER, BARRINGTON MOORE, and P. P. PITCHLYNN, Santa Fe.

Planting, Chief and Assistant Chief of Silviculture.

Silvics, G. A. PEARSON, Coconino Forest Experiment Station, Flagstaff, Ariz.

H. D. BURRALL, Assistant, Coconino Forest Experiment Station, Flagstaff, Ariz.

GRAZING

J. K. CAMPBELL, Chief.

JOHN KERR, Assistant Chief.

NATIONAL FORESTS**ARIZONA**

Apache—JOHN D. GUTHRIE, Forest Supervisor, Springerville (WU, P-WF); ALDO LEOPOLD, Forest Assistant.

Chiricahua—A. H. ZACHAU, Forest Supervisor, Douglas (WU, P-WF).

Coconino—FRANK C. W. POOLER, Forest Supervisor, Flagstaff (WU, P-WF); WILLARD M. DRAKE, Deputy Forest Supervisor; J. C. KIRCHER, Forest Assistant.

Coronado—ROBERT J. SELKIRK, Forest Supervisor, Tucson (WU, P-WF); W. F. SHERFESEE, Forest Assistant.

Crook—T. T. SWIFT, Forest Supervisor, Safford (WU-WF); H. L. JOHNSON, Forest Assistant.

Garces—W. H. B. KENT, Forest Supervisor, Nogales (WU-WF).

Prescott—C. H. HINDERER, Forest Supervisor, Prescott (WU-WF); J. C. MCNELTY, Deputy Forest Supervisor.

Sitgreaves—A. J. MACKAY, Forest Supervisor, Snowflake (WU, P-WF).

Tonto—R. G. WILLSON, Forest Supervisor, Roosevelt (WU-WF); J. W. FARMER, Deputy Forest Supervisor.

ARKANSAS

Arkansas—S. J. RECORD, Forest Supervisor, Mena (WU-WF); S. A. CHAPPELL, Deputy Forest Supervisor; FRANCIS KIEFER, Forest Assistant.

Ozark—DAVID E. FITTON, Forest Supervisor, Harrison (WU-WF); W. F. HILL, Deputy Forest Supervisor.

FLORIDA

Choctawhatchee }
Ocala } —Not under administration.

NEW MEXICO

Alamo—ARTHUR M. NEAL, Forest Supervisor, Alamogordo (WU, P-WF).

Carson—ROSS McMILLAN, Forest Supervisor, Antonito, Colo. (WU-G).

Chiricahua—See Arizona.

Datil—W. H. GODDARD, Forest Supervisor, Magdalena (WU, P-WF); R. F. BALTHIS, Deputy Forest Supervisor.

Gila—DOUGLAS RODMAN, Forest Supervisor, Silver City (WU-WF); FRANK E. ANDREWS, Deputy Forest Supervisor; H. G. CALKINS, Forest Assistant. Fort Bayard Nursery—H. C. TURNER, Forest Planting Assistant.

Jemez—THOS. R. STEWART, Forest Supervisor, Santa Fe (WU, P-WF); HARRY H. POOLER, Forest Agent.

Lincoln—J. A. KINNEY, Forest Supervisor, Capitan (WU, P-WF).

Manzano—W. R. MATTOON, Forest Supervisor, Albuquerque (WU, P-WF).

Pecos—THOS. R. STEWART, Forest Supervisor, Santa Fe (WU, P-WF); HARRY H. POOLER, Forest Agent. Las Gallinas Nursery—A. HEDRICKS, Forest Planting Assistant.

Zuni—A. D. READ, Forest Supervisor, Gallup (WU, P-WF); E. H. CRABB, Deputy Forest Supervisor.

OKLAHOMA

Wichita—FRANK RUSH, Acting Forest Supervisor, Cache (WU-WF).

DISTRICT 4

Utah, southern Idaho, western Wyoming, eastern Nevada, and northwestern Arizona.

Office, First National Bank Building, Ogden, Utah.

CLYDE LEAVITT, District Forester.

FRANKLIN W. REED, Assistant District Forester.

W. C. HENDERSON, District Law Officer.

H. P. DECHANT, Assistant District Law Officer.

OPERATION

R. P. IMES, Chief.

E. H. CLARKE, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, Q. R. CRAFT, District Fiscal Agent.

Maintenance, FELIX T. MOORE.

SILVICULTURE

L. L. WHITE, Chief.

O. M. BUTLER, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.**PROJECTS****Idaho—**

Reconnaissance of timber on Sawtooth National Forest—C. P. WILBER, Hailey.

Check scaling, Salmon National Forest—JOHN K. KIDD, Scaler, Salmon.

Reconnaissance and working plan for Minidoka National Forest—NILS B. ECKBO, Oakley.

Utah—

Reconnaissance and working plan for Manti National Forest—D. M. LANG, Ephraim.

Special timber sale work, Uinta and Ashley National Forests—DANIEL F. SEEREY, Lumberman, Provo.

Nevada—

Special timber sale and timber trespass work, Nevada and Humboldt National Forests—C. E. DUNSTON, Ogden, Utah.

Planting, J. M. FETHEROLF.

Silvics, E. R. HODSON.

PROJECT**Idaho—**

Study of silvical qualities and growth of yellow pine and Douglas fir—E. R. HODSON, Salmon.

GRAZING

HOMER E. FENN, Chief.

A. C. MCCAIN, Assistant Chief.

SUPPLY DEPOT

A. M. SMITH, Property Clerk.

PROPERTY AUDIT

J. G. FALCK, Property Auditor.

NATIONAL FORESTS**ARIZONA**

Dixie—See Utah.

Kaibab—JOHN H. CLARK, Forest Supervisor, Kanab, Utah (WU-WF); DANIEL K. JUDD, Deputy Forest Supervisor.

IDAHO

Boise—E. GRANDJEAN, Forest Supervisor, Boise (WU-P); WALTER A. HOPSON, and D. C. A. GALARNEAU, Forest Assistant.

Cache—See Utah.

Caribou—N. E. SNELL, Forest Supervisor, Idaho Falls (WU-P); L. J. PHELAN, Deputy Forest Supervisor; JAMES H. JOHNSON, Grazing Assistant.

Challis—DAVID LAING, Forest Supervisor, Challis (W U-P); JOHN A. PEARSON, Deputy Forest Supervisor.

- Idaho**—HENRY A. BERGH, Forest Supervisor, Elo (WU-P).
Lemhi—C. I. HUDDLE, Forest Supervisor, Mackay (WU-P); JAMES L. PELTON, Deputy Forest Supervisor.
Minidoka—WM. MCCOY, Forest Supervisor, Oakley (WU-P); NILS B. ECKBO, Forest Assistant.
Payette—GUY B. MAINS, Forest Supervisor, Emmett (WU-P); CARL B. ARENTSON, Deputy Forest Supervisor.
Pocatello—CLINTON G. SMITH, Forest Supervisor, Pocatello (WU-P); A. L. BROWER, Forest Assistant; Pocatello Nursery—P. T. WRENSTED, Forest Ranger.
Salmon—GEORGE G. BENTZ, Forest Supervisor, Salmon (WU-P); JAS. M. RYAN, Deputy Forest Supervisor; F. T. MCLEAN, Forest Assistant.
Sawtooth—C. N. WOODS, Forest Supervisor, Hailey (WU-P); H. G. MCPHETERS, Deputy Forest Supervisor; FRANK J. RYDER and C. P. WILBER, Forest Assistants.
Targhee—DAVID BARNETT, Forest Supervisor, St. Anthony (WU-P); J. F. BRUINS, Deputy Forest Supervisor; CHESTER B. MORSE, Forest Assistant; LUCAS W. HASTINGS, Grazing Assistant.
Weiser—J. B. LAFFERTY, Forest Supervisor, Weiser (WU-P); W. M. CAMPBELL, Deputy Forest Supervisor; A. E. OMAN, Forest Assistant.

NEVADA

- Humboldt**—C. SYDNEY TREMEWAN, Forest Supervisor, Elko (WU-WF); W. W. BLAKESLEE, Deputy Forest Supervisor.
Moapa—HARRY E. MATHEWS, Acting Forest Supervisor, Las Vegas (WU-WF).
Nevada—R. F. MATHIAS, Acting Forest Supervisor, Ely (WU-WF); CHAS. F. PATTERSON, Deputy Forest Supervisor; RUDOLPH DIEFFENBACH, Forest Assistant.
Toiyabe—M. S. BENEDICT, Forest Supervisor, Austin (WU, P-WF).

UTAH

- Ashley**—W. M. ANDERSON, Forest Supervisor, Vernal (WU-WF).
Cache—J. E. ROTHERY, Acting Forest Supervisor, Forest Supervisor, Logan (WU-P).
Dixie—JAMES E. JEWELL, Acting Forest Supervisor, St. George (WU-WF).
Fillmore—WM. HURST, Forest Supervisor, Beaver (WU-WF); GEORGE C. THOMPSON, Deputy Forest Supervisor; REESE W. TAYLOR, Forest Assistant.
Fishlake—CHARLES L. SMITH, Forest Supervisor, Salina (WU-WF); OLUF G. NIELSON, Deputy Forest Supervisor.
La Sal—JOHN RIIS, Forest Supervisor, Moab (WU-WF).
Manti—A. W. JENSEN, Forest Supervisor, Ephraim (WU-WF); ERNEST WINKLER, Deputy Forest Supervisor; LINCOLN CROWELL, Forest Assistant; PARLEY CHRISTIANSEN, Grazing Assistant.
Minidoka—See Idaho.
Nebo—DAN S. PACK, Forest Supervisor, Nephi (WU-WF).
Pocatello—See Idaho.
Powell—GEO. H. BARNEY, Forest Supervisor, Escalante (WU-WF).
Sevier—O. C. SNOW, Forest Supervisor, Panguitch (WU-WF); FRANK W. SEAMAN, Deputy Forest Supervisor.

Uinta—W. I. PACK, Forest Supervisor, Provo (WU-WF); H. F. STUDLEY, Deputy Forest Supervisor; SIDNEY S. STEWART, Forest Assistant; W. JONES BOWEN, Grazing Assistant.

Wasatch—R. V. R. REYNOLDS, Acting Forest Supervisor, Salt Lake City (WU, P-WF, P); WILLIAM M. MCGHIE, Deputy Forest Supervisor; Wasatch Nursery—N. J. FETHEROLF, Forest Planting Assistant.

WYOMING

Ashley—See Utah.

Caribou—See Idaho.

Targhee—See Idaho.

Teton—R. E. MILLER, Forest Supervisor, Jackson (WU-P).

Wyoming—JOHN RAPHAEL, Forest Supervisor, Afton (WU-P); H. E. WOOLEY, Deputy Forest Supervisor; JOHN E. INGRAM, Forest Assistant; GLIDDEN J. BARSTOW, Grazing Assistant.

DISTRICT 5

California and southwestern Nevada.

Office, First National Bank Building, San Francisco, Cal.

F. E. OLMSTED, District Forester.

COERT DUBOIS, Assistant District Forester.

E. A. LANE, District Law Officer.

PAUL MITCHELL, Assistant District Law Officer.

OPERATION

ROY HEADLEY, Chief.

R. F. HAMMATT, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, CLARENCE WILEY, District Fiscal Agent.

Maintenance, A. L. DAHL.

SILVICULTURE

G. M. HOMANS, Chief.

T. D. WOODBURY, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Supervision of operations on the Standard Lumber Company's timber sale, Stanislaus National Forest—J. C. ELLIOTT, Sonora, Cal.

Collection of data for volume table for red fir (*A. magnifica*) on the Tahoe National Forest—S. A. WILSON and J. F. PERNOT, Nevada City, Cal.

Collection of data for volume and growth tables for leading commercial species of trees in the Sierras—GERALD KENNEDY and FREDERICK THOMAS, Sonora, Cal.

Examination of timber trespass and of proposed sale areas in the recent addition to the Lassen National Forest—C. H. ENSIGN, Red Bluff, Cal.

Examination of proposed sale areas on the Trinity National Forest—L. MARGOLIN, Weaverville, Cal.

Planting, G. W. PEAVY; C. A. KUPFER, Assistant.

PROJECT

Examination and mapping of lands suitable for planting on the Cleveland National Forest—C. A. KUPFER, San Diego, Cal.

Silvics, Chief and Assistant Chief of Silviculture.

PROJECT

Establishment of sample plots and organization of silvical work—S. T. DANA, San Francisco, Cal.

GRAZING

JOHN H. HATTON, Chief.

M. B. ELLIOTT, Assistant Chief.

PRODUCTS

C. S. SMITH, in Charge.

PROJECTS

Timber Tests—

Testing laboratory in cooperation with the University of California, Berkeley, Cal.—H. S. BETTS, in charge; Assistant, G. R. GESSERT:

Tests on California eucalypts;

Tests on redwood in cooperation with the California Redwood Association;

Tests on tanbark oak in cooperation with the Northwestern Redwood Company.

Wood Preservation—

Operation of an experimental wood-preserving plant in cooperation with the Southern Pacific Company—O. T. SWAN, San Francisco, Cal.

Experiments to determine the best methods of seasoning *Eucalyptus globulus* poles and logs, in cooperation with the estate of Adolph Sutro, The Pacific Land Investment Company, the Mount Tamalpais Cemetery Association, and the Parkside Realty Company; and *Eucalyptus viminalis* logs, in cooperation with the University of California—C. STOWELL SMITH, San Francisco, Cal.

Preservative treatment of willow fence posts, in cooperation with Jesus Maria Rancho—O. T. SWAN, San Francisco, Cal.

NATIONAL FORESTS

CALIFORNIA

- Angeles**—R. H. CHARLTON, Forest Supervisor, Los Angeles (WU, P-WF); ERNEST B. LONG, Deputy Forest Supervisor; Lytle Creek Nursery—SEROPE Y. PARNAY, Forest Planting Assistant, San Bernardino.
- California**—ERNEST BRITTEN, Forest Supervisor, Willows (P-WF); N. B. DREW, Deputy Forest Supervisor.
- Cleveland**—H. A. E. MARSHALL, Forest Supervisor, San Diego (WU, P-WF); PERCY L. DAY, Deputy Forest Supervisor; F. L. RICKEY, Planting Assistant.
- Inyo**—A. H. HOGUE, Forest Supervisor, Bishop (WU-WF); JOHN D. COFFMAN, Forest Assistant.
- Klamath**—R. L. FROMME, Forest Supervisor, Yreka (P-WF); FRANK W. HARLEY, Deputy Forest Supervisor; SINCLAIR W. ALLEN, Forest Assistant.
- Lassen**—L. A. H. KLING, Forest Supervisor, Red Bluff (P-WF); J. C. LA PLANT, Deputy Forest Supervisor.
- Modoc**—C. E. RACHFORD, Forest Supervisor, Alturas (P-WF); VERNON L. BONNER, Deputy Forest Supervisor; BELKNAP C. GOLDSMITH, Forest Assistant.
- Mono**—See Nevada.
- Monterey**—RAYMOND TYLER, Forest Supervisor, Salinas (WU-WF).
- Plumas**—L. A. BARRETT, Forest Supervisor, Quincy (WU-WF); W. G. DURBIN, Deputy Forest Supervisor; J. R. HALL, Forest Assistant.
- Santa Barbara**—WILLIS M. SLOSSON, Forest Supervisor, Santa Barbara (P-WF); H. G. MERRILL, Deputy Forest Supervisor.
- Sequoia**—E. A. SHERMAN, Forest Supervisor, Hot Springs, Tulare County (WU via Portersville-WF); W. C. BURTON, Deputy Forest Supervisor; W. M. MAULE, Forest Assistant.
- Shasta**—W. B. RIDER, Forest Supervisor, Sisson (P-WF); PHILIP T. HARRIS, Deputy Forest Supervisor; ALLEN H. HODGSON, Forest Assistant.
- Sierra**—C. H. SHINN, Forest Supervisor, Northfork (WU via Fresno-WF); H. J. TOMPKINS and WM. G. HOWARD, Forest Assistants.
- Stanislaus**—R. W. AYRES, Forest Supervisor, Sonora (WU-WF); D. N. ROGERS, Deputy Forest Supervisor.
- Tahoe**—R. L. P. BIGELOW, Forest Supervisor, Nevada City (WU-WF); M. B. PRATT, Deputy Forest Supervisor; J. ALFRED MITCHEL, Forest Assistant.
- Trinity**—F. H. HAFLEY, Forest Supervisor, Weaverville (WU-WF); W. A. HUESTIS, Deputy Forest Supervisor; ERNEST V. JOTTER, Forest Assistant.

NEVADA

Inyo—See California.

Mono—J. C. WELLS, Forest Supervisor, Gardnerville (WU-WF).

Tahoe—See California.

DISTRICT 6

Washington, Oregon, and Alaska.

Office, Beck Building, Portland, Oreg.

E. T. ALLEN, District Forester.

GEO. H. CECIL, Assistant District Forester.

C. R. PIERCE, District Law Officer.

W. F. STALEY, Assistant District Law Officer.

OPERATION

C. H. FLORY, Chief.

C. J. BUCK, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, **A. H. COUSINS**, District Fiscal Agent.

Maintenance, **SHIRLEY BUCK**.

SILVICULTURE

F. E. AMES, Chief.

C. S. JUDD, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Oregon—

Examination of proposed sale areas on the Rainier and Crater National Forests—**W. T. ANDREWS**, Lumberman, Portland.

Supervision of sales and scaling on the Fremont National Forest—**J. P. HUGHES**, Lumberman, Lakeview.

Scaling on Wind River Lumber Company timber sale, May 10, 1906, Columbia National Forest—**EDWIN C. ERICKSON**, Scaler, Carson, Wash.

Supervision of sales and scaling on the Crater National Forest—**D. L. MCKAY, Jr.**, Scaler, Medford.

Planting, **J. F. KÜMMEL**.

PROJECT

Oregon—

Inspection of the Oregon and Siskiyou National Forests in preparation of plans for planting and sowing—**J. F. KÜMMEL**, Grants Pass.

Silvics, T. T. MUNGER.

PROJECT

Oregon—

Study of silvical qualities and growth of Douglas fir—T. T. MUNGER and F. G. MILLER, Portland; Assistants, E. H. CHLOUPEK, E. H. HANZLIK, H. H. BARBUR, and J. A. BRINELEY.

GRAZING

HOWARD K. O'BRIEN, Chief (in the Field).

T. P. MACKENZIE, Assistant Chief.

PRODUCTS

J. B. KNAPP, in Charge.

PROJECTS

Timber Tests—

Testing laboratory in cooperation with the University of Washington, Seattle Wash.—O. P. M. Goss in charge; Assistants, P. S. BUHL, C. W. ZIMMERMAN.

Tests of western larch in cooperation with the University of Washington and the Western Pine Manufacturers' Association.

Tests of fire-killed Douglas fir in cooperation with the Clarke County Timber Company and the Eastern and Western Lumber Company.

Supervision of the Forest Service timber-testing exhibit at the Alaska-Yukon-Pacific Exposition.

Wood Preservation—

Study of preservative processes used by commercial treating plants in Oregon and Washington—J. B. KNAPP, Portland, Oreg.

Wood Utilization—

Study of wood-using industries and markets for forest products—J. B. KNAPP, Portland, Oreg.

Study of the rate of deterioration and the usability of fire-killed timber—C. B. COX, Portland, Oreg.

Mill-scale study in cooperation with the Ketchikan Power Company—H. B. OAK-LEAF, Ketchikan, Alaska.

NATIONAL FORESTS

ALASKA

Chugach—W. A. LANGILLE, Forest Supervisor, Ketchikan (SC, U. S. A., WU-AP); HOWARD M. CONRAD, Deputy Forest Supervisor; LAGE WERNSTEDT, Forest Assistant.

Tongass—W. A. LANGILLE, Forest Supervisor, Ketchikan (SC, U. S. A., WU-AP); HOWARD M. CONRAD, Deputy Forest Supervisor; LAGE WERNSTEDT, Forest Assistant.

CALIFORNIA

Crater—See Oregon.

Siskiyou—See Oregon.

OREGON

- Cascade**—C. R. SEITZ, Forest Supervisor, Eugene (WU, P-WF); J. R. HARVEY, Deputy Forest Supervisor; E. B. STARR, Forest Assistant.
- Crater**—M. L. ERICKSON, Forest Supervisor, Medford (WU, P-WF); S. S. SWENNING, Deputy Forest Supervisor; H. D. FOSTER and B. T. HARVEY, Forest Assistants.
- Deschutes**—A. S. IRELAND, Forest Supervisor, Prineville (PT & T-WF, via Shaniko).
- Fremont**—GUY M. INGRAM, Forest Supervisor, Lakeview (WU via Klamath Falls-WF); G. D. BROWN, Deputy Forest Supervisor.
- Malheur**—CY. J. BINGHAM, Forest Supervisor, John Day (WU via Baker City-WF via Baker City).
- Oregon**—T. H. SHERRARD, Forest Supervisor, Portland (WU, P-WF, N, P); RALPH S. SHELLEY, Deputy Forest Supervisor; W. B. OSBORNE, Forest Assistant.
- Siskiyou**—M. J. ANDERSON, Forest Supervisor, Grants Pass (WU, P-WF); HUGH M. GUTHRIE, Deputy Forest Supervisor; H. HAEFNER, Forest Assistant.
- Siuslaw**—A. E. COHOON, Forest Supervisor, Eugene (WU, P-WF); D. B. REYNOLDS, Forest Assistant.
- Umatilla**—THOS. E. CHIDSEY, Forest Supervisor, Heppner (WU-P).
- Umpqua**—S. C. BARTRUM, Forest Supervisor, Roseburg (WU, P-WF); H. M. HALE, Deputy Forest Supervisor; E. H. MCDANIELS, Forest Assistant.
- Wallowa**—HARVEY W. HARRIS, Forest Supervisor, Wallowa (WU-P); SHERMAN A. BROWN, Deputy Forest Supervisor; CHAS. BLACK, Grazing Assistant.
- Wenaha**—See Washington.
- Whitman**—HENRY IRELAND, Forest Supervisor, Sumpter (WU via Baker City-WF via Baker City).

WASHINGTON

- Chelan**—GEORGE W. MILHAM, Forest Supervisor, Chelan (PT & T-GN via Wenatchee); D. S. RICE, Deputy Forest Supervisor.
- Columbia**—H. O. STABLER, Forest Supervisor, Portland, Oreg. (WU, P-WF, N, P); ARTHUR R. WILCOX, Forest Assistant.
- Colville**—C. C. REID, Acting Forest Supervisor, Republic (WU, P-GN).
- Olympic**—FRED HANSON, Forest Supervisor, Olympia (WU-GN, N); E. E. FISHIL, Deputy Forest Supervisor.
- Rainier**—G. F. ALLEN, Forest Supervisor, Orting (WU-N); H. L. HURD, Deputy Forest Supervisor; C. P. WILLIS, Forest Assistant.
- Snoqualmie**—B. P. KIRKLAND, Forest Supervisor, Seattle (WU, P-N, GN, WF); E. T. CLARK, Forest Assistant.
- Washington**—C. H. PARK, Forest Supervisor, Bellingham (WU, P-GN, N); A. A. PARKER, Deputy Forest Supervisor; F. H. BRUNDAGE, Forest Assistant.
- Wenaha**—J. M. SCHMITZ, Forest Supervisor, Walla Walla (WU-N, P).
- Wenatchee**—A. H. SYLVESTER, Forest Supervisor, Leavenworth (WU-GN); S. A. BLANKENSHIP, Deputy Forest Supervisor; FRED W. CLEATOR, Forest Assistant.

SERVICE CHANGES IN JULY

APPOINTED

Silviculture—

SILVICS: CLAUDE R. TILLOTSON, Forest Assistant.

STATE AND PRIVATE COOPERATION: ADDISON W. WILLIAMSON, Forest Assistant;
JOHN M. BRISCOE, Forest Assistant; FREDERICK C. MOON, Forest Assistant;
O. D. INGALL, Forest Agent.

Products—

WOOD UTILIZATION: CHARLES J. HELLER, Forest Assistant.

District 1—

ORGANIZATION: JOSEPH W. BUTLER, Forest Assistant, Madison National Forest;
WILLIAM W. MORRIS, Forest Assistant, Coeur d'Alene National Forest; CHES-
TER H. WILCOX, Forest Assistant, Pend Oreille National Forest; HENRY
FARQUHAR, Forest Assistant, Jefferson National Forest; ROBERT SIMMONS,
Forest Assistant, Beaverhead National Forest.

District 5—

ORGANIZATION: SINCLAIR W. ALLEN, Forest Assistant; JOHN D. COFFMAN, For-
est Assistant; BELKNAP C. GOLDSMITH, Forest Assistant; ALLEN H. HODGSON,
Forest Assistant; ERNEST V. JOTTER, Forest Assistant; J. ALFRED MITCHEL,
Forest Assistant.

SILVICULTURE: C. H. ENSIGN, Lumberman.

District 6—

ORGANIZATION: EVERETT H. MACDANIEL, Forest Assistant; DEXTER B. REY-
NOLDS, Forest Assistant; WM. B. OSBORNE, Jr., Forest Assistant; BARTLE
T. HARVEY, Forest Assistant; EDWIN J. FENBY, Forest Assistant.

ASSIGNED

District 1—

ORGANIZATION: J. A. FITZWATER, Forest Assistant, Absaroka National Forest;
F. I. ROCKWELL, Forest Assistant, Coeur d'Alene National Forest; J. F. PRES-
TON, Deputy Forest Supervisor, Beartooth National Forest.

RESTORED TO THE ROLLS

Forester—

INSPECTION: R. E. BENEDICT, General Inspector.

FURLOUGHED

Forester—

INFORMATION: TREADWELL CLEVELAND, Jr., Expert.

District 5—

SILVICULTURE: JOHN LAFON, Jr., Lumberman.

District 6—

ORGANIZATION: W. W. CRYDER, Forest Supervisor; F. B. KELLOGG, Forest
Assistant.

CHANGE IN DESIGNATION

Silviculture—

STATE AND PRIVATE COOPERATION: W. H. VON BAYER, Forest Assistant.

District 1—

ORGANIZATION: HARRY S. KAUFMAN, from Deputy Supervisor to Forest Ranger, Absaroka National Forest; THOS. C. SPAULDING, from Forest Ranger to Forest Assistant, Lolo National Forest.

District 6—

ORGANIZATION: C. C. REID, Deputy Forest Ranger to Deputy Forest Supervisor; SHERMAN A. BROWN, Assistant Forest Ranger to Deputy Forest Supervisor; E. E. FISHEL, Forest Ranger to Deputy Forest Supervisor; H. L. HURD, Deputy Forest Ranger to Deputy Forest Supervisor.

TRANSFERRED

District 1—

ORGANIZATION: C. N. WHITNEY, Forest Assistant, from Blackfeet National Forest to Cabinet National Forest; RUTLEDGE PARKER, Forest Assistant, from Coeur d'Alene National Forest to Kootenai National Forest; M. N. STICKNEY, Forest Assistant, from Lolo National Forest to Bitterroot National Forest.

District 5—

ORGANIZATION: R. L. FROMME, from Chief of Operation to Forest Supervisor, Klamath National Forest; ROY HEADLEY, from Assistant Chief of Operation to Chief of Operation; R. F. HAMMATT, from Chief of Section of Occupancy to Assistant Chief of Operation; D. N. ROGERS, from Forest Assistant to Deputy Forest Supervisor.

District 6—

ORGANIZATION: A. A. PARKER, Deputy Forest Supervisor, from Wenatchee National Forest to Washington National Forest.

RESIGNED

Silviculture—

STATE AND PRIVATE COOPERATION: FREDERICK C. MOON, Forest Assistant.

SEPARATED

Silviculture—

STATE AND PRIVATE COOPERATION: AUSTIN CARY, Expert.

GEORGE F. POLLOCK—With deep regret announcement is made of the death, on July 6, of Mr. George F. Pollock, formerly Chief of the Office of Lands in the Forest Service. Before entering the Forest Service Mr. Pollock was Assistant Commissioner of the General Land Office. He resigned from the Forest Service on April 6, 1908, to enter into the private practice of law.

W. W. CLARK—With deep regret announcement is made of the death, on July 20, of Supervisor W. W. Clark, of the Cache National Forest. Supervisor Clark was a graduate of the Cornell School of Forestry and entered the Service October 23, 1905. Previous to this he served for three years in the Philippine Bureau of Forestry. Through the death of Mr. Clark the Service has lost one of its most efficient members.

SERVICE NOTES FOR AUGUST

These notes contain instructions and necessary information for Forest officers, and will, therefore, be carefully read and kept on file for reference.

OFFICE OF THE FORESTER

LAW

Claims, Reports—

The instructions in the second Service Note on page 26, July Field Program, are hereby amended by striking out the words "prepared or" in the second line, since reports should be prepared on all claims examined and copies should be kept in the supervisors' files even when they need not be submitted to the chief of field division or District Forester. Said instructions are also hereby extended to apply to claims where requests for reports are received from the Land Department after final proof has been submitted. In such cases, also, no report will be made to the Land Department when the Forest officers find that the claims are in good faith and that their passage to patent will not interfere with National Forest interests, but the requests for reports will be returned to the chief of field division with the indorsement, "Patent will not prejudice National Forest interests."

The Commissioner of the General Land Office has informed the Forester that Forest Service officers continue to submit reports which do not show adverse facts in cases where no notice of final proof or request for report has been issued by the Land Department. This should be discontinued at once, since it is contrary to the instructions issued by the Forester in March requiring that no claims reports shall be submitted to the Land Department except upon request of that Department, or when claims actively interfere with National Forest interests or management. Accordingly, under all the existing instructions, no claims reports will be submitted to the Land Department, except reports showing adverse facts.

Fire Trespasses—

The defendants in the following cases pleaded guilty of willfully setting fires upon the National Forests: Umatilla National Forest—Tolle A. Spray, sentenced to one year's imprisonment; Siskiyou National Forest—Charles Page, sentenced to pay fine of \$50.

Criminal proceedings were recommended to the Department of Justice against John Sullivan and J. R. Rollins, both cases of fire trespass upon the Ozark National Forest.

Saloon Trespass—Proceedings Recommended—

Criminal proceedings were recommended against J. Rebello and J. Vermetti, saloon trespassers upon the Prescott National Forest.

Timber Trespass—Indictment Returned—

The May session of the Federal grand jury, convened at Batesville, Ark., returned an indictment against John W. Bunch, timber trespasser upon the Ozark National Forest.

Ejectment of Squatter—Suit Recommended—

Suit in ejectment was recommended to the Department of Justice against Clemente Mestas, squatter upon land withdrawn for a ranger station in the Pecos National Forest.

OPERATION

Administrative Unit Changes—

On July 1 all of the Beaverhead National Forest in T. 13 N., R. 34 E., Boise Meridian, was transferred from District 1 to District 4 and put under the administration of the supervisor of the Targhee National Forest. On the same date all the remaining portion of the Beaverhead *in Idaho* lying south of T. 14 N. was also transferred from District 1 to District 4 and put under the administration of the supervisor of the Lemhi National Forest.

On July 1 the western division of the Manzano National Forest (formerly Mount Taylor National Forest) was transferred to the administration of the supervisor of the Zuni National Forest.

On July 1 that portion of the Weiser National Forest lying east of the divide between the Weiser and Payette watersheds was transferred to the administration of the supervisor of the Payette National Forest.

On July 1 the following changes were made in the administrative boundary between the Ashley and Uinta National Forests: North of the Uinta Range the boundary was changed from Cottonwood Creek to the divide between Cottonwood Creek watershed and Henrys Fork watershed. South of the Uinta Range the boundary was changed from Lake Fork Creek to the divide between Lake Fork watershed and Rock Creek watershed.

On July 1 the San Luis National Forest was put under the administration of the supervisor of the Santa Barbara National Forest.

Oregon Caves National Monument—

On July 10 the President signed a proclamation creating the Oregon Caves National Monument, including the "Oregon Caves" located within the Siskiyou National Forest in Oregon. The area of the National Monument is approximately 480 acres. The caves are located on the slope of a mountain known as Cave Mountain, which is of limestone formation. They consist of a series of galleries, with thousands of passageways leading in all directions. The formations of the lime deposits caused by dripping are among the finest known, and the extent of the caves is not yet ascertained.

Reimbursement Accounts—

Attention is again called to the note in the Field Program for May, 1908, page 17, instructing Forest officers that expenses incurred by one member of the Forest Service must not be included in a reimbursement account of another member. The Auditor for the State and Other Departments has taken a very decided stand against this practice, holding that such method constitutes the member submitting the account a disbursing officer without proper authority.

Outstanding Accounts—

All members of the Service are requested to see that outstanding accounts chargeable against the fiscal year 1909 are submitted to the District Fiscal Agent for settlement at the earliest practicable date. The records from which the 1909 congressional reports are made up will be closed August 31 this year, one month earlier than usual, and it is desired that all accounts be paid so far as possible by that time.

Requisitions for Supplies—

Attention is again called to the requirement in Service Order No. 17, May 21, 1908, that standard supplies be secured by requisition from the Ogden Supply Depot. Local purchases of such supplies, except in cases of extreme emergency, will be disapproved and the purchaser be held personally liable.

Nonexpendable Property—Receipts and Reports—

The last paragraph of section 147, page 265, of the May Field Program is not being followed with sufficient care. Strict observance of it is necessary for the accurate and economical keeping of the Property Auditor's records.

SILVICULTURE

Supervisors' Advertised Sales—Delegation of Authority—

The authority to make supervisors' advertised sales is a personal matter between the supervisor and the District office, and may not be delegated by the supervisor to the acting supervisor or to any other officer on the Forest without the consent of the District Forester. Neither can the supervisor delegate the authority to sign notices of sales and to approve applications for advance cutting, for extension of time or for modification of agreement in supervisors' advertised sales.

GRAZING

Numbering of Applications and Permits—

The serial number given an approved application for a grazing permit is principally for the purpose of identification in future correspondence or business relating to the case. Therefore, the same serial number should not be given to any two different applicants, and when an application or permit is canceled, either on account of the stock having been sold or for any other cause, the same serial number should not be used again.

SERVICE PUBLICATIONS ISSUED IN JULY

Circular 163. Paper Birch in the Northeast.

166. The Timber Supply of the United States.

Silvical Leaflet 43. Red or Norway Pine.

44. Jack Pine.

46. Limber Pine.

47. Piñon Pine.

50. Big Shellbark or Kingnut Hickory.

Unnumbered publications:

Information Regarding Employment on the National Forests (third revision).

Instructions for the Building and Maintenance of Telephone Lines on the National Forests.

SERVICE ORDERS

SERVICE ORDER 33

JUNE 30, 1909.

RECORD AND REPORT OF RECEIPTS AND REFUNDS

The procedure relating to record and report of receipts and refunds outlined in the Manual on pages 58, 59, and 82 is hereby amended as follows:

Record of Receipts—

Beginning July 1, 1909, the triplicates of the Notification of Receipt (Form 26) will not be filed alphabetically as an index to receipts, but will be filed by classes and Forests and substituted for the Record of Current Receipts (Form 27). Daily, before filing, these triplicates will be totaled and proved by comparison with the Abstract of Receipts and a memorandum will be made on the carbon of the latter showing, by classes, the total receipts for the day.

At the end of the month the triplicates will be totaled by Forests and classes and the amounts entered on Forest receipt cards (Form 28). The totals will then be proved by comparison with the totals by corresponding classes as entered on the carbon of the Abstract of Receipts.

Refunds—

At the end of the month the refund vouchers paid will be assembled by Forests and classes, and the amounts refunded entered as hitherto on the appropriate Forest receipt and summary cards (Form 28). The totals will be proved by comparison with the total shown on the Abstract of Disbursements.

Monthly Report.

A report of receipts will be compiled in duplicate at the end of each month showing the total gross receipts by classes and the total gross receipts for the District, and submitted to the District Forester not later than the fifth of the succeeding month. The District Forester will immediately forward one copy to the Forester.

At the close of the fiscal year a final report will be submitted on Atlas sheets which will show gross receipts, refunds, and net receipts by classes, by Forests, and for the District.

OVERTON W. PRICE,
Associate Forester.

SERVICE ORDER No. 34

AMENDMENT OF SERVICE ORDER 30

JULY 28, 1909.

Service Order No. 30 is hereby amended so that the first sentence in the second paragraph will read:

Freight shipments should be made on a department bill of lading.

And by adding the following sentence at the end of the same paragraph:

Small local shipments where the charges do not exceed one or two dollars, and where no land grant is involved may be paid by the member concerned and included in his reimbursement account supported by the receipted bill of lading of the company.

OVERTON W. PRICE,
Associate Forester.

O

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

GIFFORD PINCHOT, Forester

September Field Program 1909

This program of field work and assignments in the Forest Service is issued on the first day of each month and is for the exclusive use of members of the Service and cooperating bureaus. The names of members whose assignments are not yet fixed and reference to projects for which plans have not been matured are necessarily omitted. All orders and other instructions printed in the Field Program will apply to all Districts.

It is requested that the members of the Forest Service cooperate in making this program complete and accurate.

Unless the address of a member is given in this program or is definitely known, he should be addressed in care of the Forest Service, Washington, D. C.

FIELD PROGRAM FOR SEPTEMBER, 1909

OFFICE OF THE FORESTER

GIFFORD PINCHOT, Forester.

OVERTON W. PRICE, Associate Forester.

HARRY L. HILL, Secretary to the Forester.

P. P. WELLS, Law Officer.

A. C. SHAW, Assistant Law Officer.

HERBERT A. SMITH, Editor.

FINDLEY BURNS, in charge of Publication.

RAYMOND W. PULLMAN, in charge of Information.

GEORGE B. SUDWORTH, Dendrologist.

R. S. KELLOGG, Assistant Forester, engaged upon Forest Statistics.

EUGENE S. BRUCE, Expert Lumberman.

D. D. BRONSON, } General Inspectors.
R. E. BENEDICT, }

E. M. GRIFFITH, Special Inspector for Indian Reservations in Wisconsin, Madison Wis.

OPERATION

JAMES B. ADAMS, Assistant Forester, in Charge.

CHAS. S. CHAPMAN, Assistant Forester.

GEORGE G. ANDERSON, Assistant in Office Methods.

ACCOUNTS

H. B. CRAMER, Fiscal Agent.

E. A. MELZAR, District Fiscal Agent.

GEOGRAPHY

F. G. PLUMMER, Chief.

Atlas, G. B. BRUCE, Acting.

Drafting, C. A. KOLB.

Alienation, J. B. SATTERLEE.

Photography, A. G. VARELA.

MAINTENANCE

GEORGE A. BENTLEY, Chief.

SILVICULTURE

WILLIAM T. COX, Assistant Forester, in Charge.
E. E. CARTER, Assistant Forester.

STATE AND PRIVATE COOPERATION

J. G. PETERS, Chief (in the Field).
J. H. FOSTER, Acting Chief.

PROJECTS

Alabama—

Preparation of a working-plan report for the Tennessee Coal, Iron and Railroad Company—E. D. CLARK, Washington, D. C.

Eastern States—

General inspection of experiments in nursery and planting work, in cooperation with different States—E. O. SIECKE and W. M. MOORE, Washington, D. C.

Preliminary examinations of forest land, in cooperation with private owners—E. D. CLARK, Washington, D. C.

Kentucky—

Study of forest conditions in cooperation with State Board of Agriculture, Forestry, and Immigration—R. C. HALL, W. H. VON BAYER, J. M. BRISCOE, and O. D. INGALL, Washington, D. C.

North Carolina—

Study of forest conditions, in cooperation with North Carolina Geological and Economic Survey—J. S. HOLMES, W. B. WILLEY, and A. W. WILLIAMSON, Chapel Hill.

Virginia—

Preliminary examination of forest conditions, in cooperation with the State, and examinations of forest land, in cooperation with private owners—W. W. ASHE, Richmond.

SILVICS

RAPHAEL ZON, Chief.

PROJECTS

General—

Basket-willow study and seed testing and seed storage—N. H. GRUBB, Washington, D. C.

Northeastern States—

Study of northern hardwoods—E. H. FROTHINGHAM, Portland, Me.

Western States—

Location of insect-infested timber in the National Forests, with practical application of methods of insect control—W. D. EDMONSTON (detailed to the Bureau of Entomology under instructions from Dr. A. D. HOPKINS, in charge of forest-insect investigations), Colorado Springs, Colo.

Computing, E. A. ZIEGLER.

Library, Miss H. E. STOCKBRIDGE.

GRAZING

A. F. POTTER, Assistant Forester (in the Field).

L. F. KNEIPP, Assistant Forester (in Charge).

WILL C. BARNES, Inspector of Grazing (in the Field).

PROJECTS

Forage investigations; compilation of data—F. V. COVILLE, Botanist, Bureau of Plant Industry, in charge, Washington, D. C.; in charge of experimental pasture, JAMES T. JARDINE, Deputy Forest Supervisor, Wallowa, Oreg.; forage plant investigations, ARTHUR T. SAMPSON, Plant Ecologist, Wallowa, Oreg. (detailed to Bureau of Plant Industry under instructions of F. V. COVILLE, Botanist).

Identification of grasses and plants—Dr. EDWARD L. GREENE, Consulting Expert, Washington, D. C.

PRODUCTS

WM. L. HALL, Assistant Forester, in Charge (in the Field).

MCGARVEY CLINE, Assistant Forester.

WOOD PRESERVATION

HOWARD F. WEISS, in Charge.

JOHN M. NELSON, JR., Assistant.

PROJECTS

Construction and experimental operation of a wood-preserving plant, in cooperation with the Alabama Wood Preserving Company—EDWARD H. FORD, Birmingham, Ala.

Installation and operation of an experimental tie-treating plant, in cooperation with the Tennessee Coal, Iron and Railroad Company—EDWARD H. FORD, Birmingham, Ala.

Experimental operation of a treating plant, in cooperation with the Indianapolis, Columbus and Southern Traction Company—C. P. WINSLOW, Columbus, Ind.; assistant, E. W. PETERS.

Experimental operation of a commercial nonpressure plant for the treatment of mine timbers, in cooperation with the Philadelphia and Reading Coal and Iron Company—J. M. NELSON, JR., Washington, D. C.; assistant detailed by the company, L. W. Conrad, Pottsville, Pa.

Design and construction of apparatus for the prevention of sap stain and for a wood-preserving plant, in cooperation with the Great Southern Lumber Company.—C. T. BARNUM, Washington, D. C.

Construction and experimental operation of a low-pressure wood-preserving plant, in cooperation with the War Department, Picatinny Arsenal—F. M. BOND, Dover, N. J.

Investigations in handling and seasoning cypress poles, in cooperation with the Kennett Cypress and Hardwood Lumber Company, Kennett, Mo.—C. T. BARNUM, Washington, D. C.

TIMBER TESTS

ROLF THELEN, in Charge.

PROJECTS

Correlation of file system and analysis of timber-test data—H. E. MCKENZIE and J. O. BIXBY.

Timber-testing laboratory, New Haven, Conn., in cooperation with Yale University—H. D. TIEMANN in charge; assistant, CORNELIUS BARRY; W. D. BRUSH, microscopist:

Study of the effect of drying on the strength and other properties of wood;

Study of the effect of drying on the absorption of water by wood;

Microscopic study of the mechanical failure of wood.

Timber-testing laboratory, Lafayette, Ind., in cooperation with Purdue University—W. K. HATT in charge; assistants, J. A. NEWLIN, THOMAS LYONS, and HARRY WEYLS:

Study of the effect of creosoting on the strength of southern pine, in cooperation with the Illinois Central Railway;

Study of the physical and mechanical properties of several species of hickory, in cooperation with the National Hickory Association;

Study of the physical and mechanical properties of red oak cross-ties treated by various preservative processes, in cooperation with the American Railway

Engineering and Maintenance of Way Association.

WOOD CHEMISTRY

H. S. BRISTOL, in Charge.

H. E. SURFACE, Assistant.

PROJECTS

Study of methods of wood distillation and for the standardization and grading of turpentine—L. F. HAWLEY, at Madison, Wis.

Experiments with various woods for paper pulp—E. SUTERMEISTER; assistant, J. L. MERRILL, both at Washington, D. C.

Study of wood preservatives and of chemical problems in wood utilization—E. BATEMAN, at Washington, D. C.

WOOD UTILIZATION

H. S. SACKETT, in Charge.

PROJECTS

Markets—

Preparation of a market report for Chicago, Ill.—FRANKLIN H. SMITH, 1418 Fisher Building, Chicago, Ill.; assistant, CHARLES J. HELLER.

Prices—

Collection of wholesale lumber prices in the markets and f. o. b. mill prices—FRANKLIN H. SMITH, 1418 Fisher Building, Chicago, Ill.; assistant, CHARLES J. HELLER.

Wood Uses—

Study of the wood-using industries of Illinois—FRANKLIN H. SMITH, 1418 Fisher Building, Chicago, Ill.

Study of the wood-using industries of Kentucky, in cooperation with the State Board of Agriculture, Forestry, and Immigration—FRANKLIN H. SMITH, 1418 Fisher Building, Chicago, Ill.

Study of the wood-using industries of Massachusetts, in cooperation with F. W. RANE, State Forester, State House, Boston, Mass.—H. S. SACKETT, Washington, D. C.

Study of the wood-using industries of North Carolina, in cooperation with the North Carolina Geological and Economic Survey—HU MAXWELL, Washington, D. C.

Preparation of reports upon the uses of the principal commercial woods—HU MAXWELL, Washington, D. C.

DISTRICTS

DISTRICT 1

Montana, northeastern Washington, northern Idaho, northwestern South Dakota, northern Michigan, northern Minnesota, and southwestern North Dakota.

Office, Hammond Block, Missoula, Mont.

W. B. GREELEY, District Forester.

F. A. SILCOX, Assistant District Forester.

W. M. AIKEN, District Law Officer.

E. B. QUIGGLE, Assistant District Law Officer.

OPERATION

R. H. RUTLEDGE, Chief.

R. Y. STUART, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, **H. I. LOVING**, District Fiscal Agent.

Maintenance, **R. L. CAMPBELL**.

SILVICULTURE

A. W. COOPER, Chief.

D. T. MASON, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Idaho—

Check scaling, Coeur d'Alene National Forest—**G. L. COTT**, Wallace.

Montana—

Estimate of timber, with classification and appraisal of land, on Northern Pacific Railway sections in cooperation with the railway—**KARL W. WOODWARD**, Missoula; Deerlodge and Helena National Forests, **W. B. PIPER**, Boulder; Absaroka National Forest, **N. C. BROWN**, Livingston; Jefferson National Forest, **R. C. HAWLEY**, Great Falls; Blackfeet and Cabinet National Forests, **L. S. MURPHY**, Kalispell; Lolo and Missoula National Forests, **E. D. FLETCHER**, Missoula.

Planting, Chief and Assistant Chief of Silviculture.

PROJECTS

Inspection of Coeur d'Alene and Pend Oreille National Forests in preparation of five-year planting plans—E. C. CLIFFORD, Wallace, Idaho.

Work on the Boulder Nursery—G. B. McDONALD, Boulder, Mont.

Silvics, Chief and Assistant Chief of Silviculture.

PROJECTS

Idaho—

Preparation of yield tables, Coeur d'Alene National Forest—F. I. ROCKWELL, Wallace.

Montana—

Preparation of yield tables, Kootenai National Forest—E. I. TERRY Libby.

GRAZING

C. H. ADAMS, Chief (in the Field).

W. S. PERRINE, Assistant Chief.

PRODUCTS

PROJECTS

Wood Preservation—

Construction and experimental operation of a wood-preserving plant for treating fence posts and other ranch timbers, in cooperation with the Bitter Root Stock Farm—P. R. HICKS, Missoula, Mont.

Construction and experimental operation of a wood-preserving plant for treating ties, mine timbers, and telephone poles, in cooperation with the Anaconda Copper Mining Company—P. R. HICKS, Missoula, Mont.

NATIONAL FORESTS

IDAHO

Beaverhead—See Montana.

Clearwater—F. A. FENN, Forest Supervisor, Kooskia (WU-N); EDW. C. THENON, Deputy Forest Supervisor.

Coeur d'Alene—W. G. WEIGLE, Forest Supervisor, Wallace (WU-N); E. R. BRUNKE, Deputy Forest Supervisor; F. I. ROCKWELL and WM. W. MORRIS, Forest Assistants.

Kaniksu—See Washington.

Nezperce—GEO. V. RING, Forest Supervisor, Grangeville (WU-N).

Pend Oreille—J. E. BARTON, Forest Supervisor, Sandpoint (W-UN, W); EDW. G. STAHL, Deputy Forest Supervisor; C. H. WILCOX, Forest Assistant.

MICHIGAN

Marquette
Michigan }—Not under administration.

MINNESOTA

Minnesota—G. E. MARSHALL, Forest Supervisor, Cass Lake (WU-GN).

Superior—SCOTT LEAVITT, Acting Forest Supervisor, Ely (WU-GN).

MONTANA

Absaroka—V. GIFFORD LANTRY, Forest Supervisor, Livingston (WU-N); J. A. FITZWATER, Forest Assistant.

Beartooth—J. F. PRESTON, Acting Forest Supervisor, Red Lodge (WU-N).

Beaverhead—C. K. WYMAN, Forest Supervisor, Dillon (WU-P); R. J. MOORE, Deputy Forest Supervisor; ROBERT SIMMONS, Forest Assistant.

Bitterroot—W. W. WHITE, Forest Supervisor, Missoula (WU-N); M. N. STICKNEY, Forest Assistant.

Blackfeet—F. N. HAINES, Forest Supervisor, Kalispell (WU-GN); R. P. McLAUGHLIN, Deputy Forest Supervisor.

Cabinet—RALPH H. BUSHNELL, Acting Forest Supervisor, Thompson Falls (WU-N); C. N. WHITNEY, Forest Assistant.

Custer—GLEN A. SMITH, Acting Forest Supervisor, Ashland (WU via Forsyth-N via Forsyth).

Deerlodge—C. C. HALL, Forest Supervisor, Anaconda (P-N); F. S. PATTON, Forest Assistant; ARETAS A. SAUNDERS, Forest Assistant.

Flathead—PAGE S. BUNKER, Forest Supervisor, Kalispell (WU-GN); JOHN C. CLACK, Deputy Forest Supervisor.

Gallatin—D. T. CONKLING, Forest Supervisor, Bozeman (WU-N).

Helena—DWIGHT BUSHNELL, Forest Supervisor, Helena (WU-N); J. D. WARNER, Deputy Forest Supervisor.

Jefferson—J. B. SEELY, Forest Supervisor, Great Falls (WU-N); WELLMAN HOLBROOK, Deputy Forest Supervisor; HENRY FARQUHAR, Forest Assistant.

Kootenai—DORR SKEELS, Acting Forest Supervisor, Libby (WU-GN); RUTLEDGE PARKER, Forest Assistant.

Lewis and Clark—W. H. DAUGS, Forest Supervisor, Chouteau (WU via Collins-GN via Collins).

Lolo—ELERS KOCH, Forest Supervisor, Missoula (WU, P-N); THOS. C. SPAULDING, Forest Assistant.

Madison—CLIFTON W. HUDSON, Forest Supervisor, Sheridan (WU-N); JOS. W. BUTLER, Forest Assistant.

Missoula—D. G. KINNEY, Forest Supervisor, Missoula (WU, P-N); RUSSELL G. POND, Deputy Forest Supervisor.

Sioux—See South Dakota.

NORTH DAKOTA

Dakota—C. A. BALLINGER, Forest Supervisor, Camp Crook, S. Dak. (WU via Belle Fourche-Am via Belle Fourche).

SOUTH DAKOTA

Sioux—C. A. BALLINGER, Forest Supervisor, Camp Crook (WU via Belle Fourche-Am via Belle Fourche).

WASHINGTON

Kaniksu—W. N. MILLAR, Acting Forest Supervisor, Newport (WU-GN); WM. C. LATANE, Forest Assistant.

DISTRICT 2

Colorado, Wyoming, South Dakota, Nebraska, and western Kansas.

Office, Majestic Building, Denver, Colo.

SMITH RILEY, District Forester.

P. G. REDINGTON, Assistant District Forester.

J. M. CATES, District Law Officer.

J. F. LAWSON, Assistant District Law Officer.

OPERATION

FRED W. MORRELL, Chief.

C. J. STAHL, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, **JOHN A. URBANOWICZ**, District Fiscal Agent.

Maintenance, **F. B. AGEE**.

SILVICULTURE

A. K. CHITTENDEN, Chief.

S. L. MOORE, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS**Colorado—**

Reconnaissance work, Leadville National Forest—**J. BENTLEY, Jr.**, Dillon; assistants, **J. E. ELLIOTT**, Lumberman, **E. C. BUNKER**, **R. H. THOMPSON**, **W. L. BARKER**, and **HENRY REINSCH**.

Wyoming—

Special timber sale work, Cheyenne National Forest—**G. P. GREGG**, Lumberman, and **R. W. ALLEN**, Laramie.

Planting, L. C. MILLER.

PROJECT

Colorado—

Preparation of five-year plans for planting and sowing for the Battlement National Forest—R. G. PIERCE, Collbran.

Seed collecting on the Sopris National Forest—C. R. TAYLOR, Aspen.

Silvics, C. G. BATES.

PROJECTS

Colorado—

Special silvical studies—Dr. F. E. CLEMENTS, Halfway; assistant, A. G. HAMEL.

Wyoming—

Study of lodgepole pine cutting systems—C. G. BATES, Laramie; assistants, D. E. FINKBINER and H. K. RUPP.

GRAZING

J. W. NELSON, Chief.

E. N. KAVANAGH, Assistant Chief.

PRODUCTS

C. L. HILL, in Charge.

PROJECTS

Timber Tests—

Timber-testing laboratory in cooperation with the University of Colorado, Boulder, Colo.—NORMAN BETTS, in charge; assistants, A. D. WOLFF and H. V. BLANK.

Tests on round timbers of various Rocky Mountain species, including mine timbers, in cooperation with the Northern Coal and Coke Company and various National Forests.

Tests on western red cedar, lodgepole pine, and Engelmann spruce telephone poles, in cooperation with the South Platte Power Company, Central Colorado Power Company, and the Colorado Telephone Company.

Wood Preservation—

Preservative treatment of telephone poles, in cooperation with the Colorado Telephone Company—D. L. CARMODY, Norrie, Colo.

Preservative treatment of telephone poles, in cooperation with Robert Reed for the Rifle Creek Power Company—D. L. CARMODY, Norrie, Colo.

Preservative treatment of transmission poles, in cooperation with the Central Colorado Power Company—D. L. CARMODY, Norrie, Colo.

Operation of National Forest treating plant for the Routt National Forest, treating drift-fence posts and telephone poles, and cooperation with ranchmen in treatment of fence posts, Steamboat Springs, Colo.

Preliminary examination of the Smuggler-Union, Tomboy, and Liberty Bell mines, to determine the feasibility of applying wood preservation, and to outline a policy, in cooperation with the Smuggler-Union Mining Company—H. M. MASON, JR., Telluride, Colo.

Wood Utilization—

Study of wood-using industries—H. B. HOLROYD, Denver, Colo.

NATIONAL FORESTS

COLORADO

- Arapaho**—C. G. POOLE, Forest Supervisor, Sulphur Springs (WU-Ad); LEE E. COOPER, Deputy Forest Supervisor; G. W. HENDRY, Forest Assistant.
- Battlement**—DAVID ANDERSON, Forest Supervisor, Collbran (WU-WF, G); JOHN W. LOWELL, Jr., Deputy Forest Supervisor.
- Cochetopa**—EUGENE WILLIAMS, Forest Supervisor, Saguache (WU-G).
- Gunnison**—WM. R. KREUTZER, Forest Supervisor, Gunnison (WU-WF, G); E. C. BERKY, Deputy Forest Supervisor.
- Hayden**—See Wyoming.
- Holy Cross**—HARRY H. FRENCH, Forest Supervisor, Glenwood Springs (WU-WF, G); ALBERT H. MILLER, Deputy Forest Supervisor.
- La Sal**—See Utah.
- Las Animas**—C. A. WHITNEY, Acting Forest Supervisor, La Veta (WU-G).
- Leadville**—A. L. STROUP, Forest Supervisor, Leadville (WU, P-WF, G); J. E. MARTIN, Forest Assistant.
- Medicine Bow**—H. N. WHEELER, Forest Supervisor, Fort Collins (WU-WF).
- Montezuma**—RESS PHILLIPS, Forest Supervisor, Mancos (WU-G); FRANK TOMPKINS, Deputy Forest Supervisor.
- Pike**—C. W. FITZGERALD, Forest Supervisor, Denver (WU, P-Ad, G, P, US, WF); C. M. GRANGER, Deputy Forest Supervisor; Monument Nursery—W. SCHRADER, Forest Planting Assistant, Monument.
- Rio Grande**—W. J. MORRILL, Acting Forest Supervisor, Monte Vista (WU-G); WALTER F. BOWERS, Deputy Forest Supervisor; P. T. COOLIDGE, Forest Assistant.
- Routt**—J. H. RATLIFF, Forest Supervisor, Steamboat Springs (WU-Ad); C. A. SOMMERS, Deputy Forest Supervisor; P. J. PAXTON, Forest Assistant.
- San Isabel**—J. N. LANGWORTHY, Forest Supervisor, Westcliffe (WU-G); THEODORE SHOEMAKER, Jr., Deputy Forest Supervisor.
- San Juan**—ERNEST W. SHAW, Forest Supervisor, Durango (WU-G); A. L. SWEITZER, Deputy Forest Supervisor; PETER KEPLINGER, Forest Assistant.
- Sopris**—JOHN McLAREN, Acting Forest Supervisor, Aspen (WU-WF, G); JAY HIGGINS, Forest Assistant.
- Uncompahgre**—HENRY L. SPENCER, Forest Supervisor, Delta (WU-G); HOWARD S. BUSHNELL, Deputy Forest Supervisor; J. H. RAMSKILL, Forest Assistant.
- White River**—JAMES A. BLAIR, Forest Supervisor, Meeker (WU-WF, G); ELMER E. STEPHENSON, Deputy Forest Supervisor.

KANSAS

Kansas—B. R. H. D'ALLEMAND, Forest Supervisor, Garden City (WU, P-WF);
Garden City Nursery—C. R. TAYLOR, Forest Planting Assistant.

NEBRASKA

Nebraska—W. H. MAST, Forest Supervisor, Halsey (WU-Ad); H. R. SHOCKLEY,
Deputy Forest Supervisor; Halsey Nursery—L. BESLEY and C. R. BECHTLE,
Forest Planting Assistants.

SOUTH DAKOTA

Black Hills—PAUL D. KELLETER, Forest Supervisor, Deadwood (WU-Ad, Am);
JOHN MURDOCH, Jr., and G. A. DUTHIE, Forest Assistants.

WYOMING

Bighorn—W. E. JACKSON, Forest Supervisor, Sheridan (WU-Ad); HERBERT GRAFF,
Deputy Forest Supervisor.

Bonneville—FOSTER STEELE, Acting Forest Supervisor, Pinedale (WU-P); H.
EARLE FRENCH, Deputy Forest Supervisor.

Cheyenne—P. S. LOVEJOY, Forest Supervisor, Laramie (WU, P-P); JOHN W.
STEPHENS, Deputy Forest Supervisor; R. A. STRETCH, Forest Assistant.

Hayden—JAMES BLACKHALL, Forest Supervisor, Encampment (WU, P-P); ARTHUR
M. COOK, Deputy Forest Supervisor.

Shoshone—H. W. THURSTON, Forest Supervisor, Cody (WU-Ad).

Sundance—FRANK S. THOMSON, Acting Forest Supervisor, Sundance (WU-Ad, Am).

DISTRICT 3

Arizona, Arkansas, Florida, New Mexico, and Oklahoma.

Office, Strickler-Luna Building, Albuquerque, N. Mex.

A. C. RINGLAND, District Forester.

E. H. CLAPP, Assistant District Forester.

H. B. JAMISON, District Law Officer.

BLAKE FRANKLIN, Assistant District Law Officer.

OPERATION

A. O. WAHA, Chief.

A. S. PECK, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, J. J. DUFFY, District Fiscal Agent.

Maintenance, W. B. BUNTON.

SILVICULTURE

T. S. WOOLSEY, Jr., Chief.

A. B. RECKNAGEL, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Arizona—

Preparation of working plan report for portion of Sitgreaves National Forest—D. W. ADAMS, Albuquerque, N. Mex.

Preparation of working plan report for Coconino National Forest—J. H. ALLISON, Albuquerque, N. Mex.

New Mexico—

Reconnaissance of Pecos National Forest—I. F. ELDREDGE, in charge; assistants, HARRY POOLER, BARRINGTON MOORE, P. P. PITCHLYNN, T. E. WELLS, and F. R. WIGELY, Santa Fe.

Check scaling on the Zuni National Forest (Fort Wingate Military Reservation)—D. W. ADAMS, Guam.

Planting, Chief and Assistant Chief of Silviculture.

Silvics, G. A. PEARSON, Coconino Forest Experiment Station, Flagstaff, Ariz.;

H. D. BURRALL, assistant, Coconino Forest Experiment Station, Flagstaff, Ariz.

GRAZING

J. K. CAMPBELL, Chief.

JOHN KERR, Assistant Chief.

NATIONAL FORESTS

ARIZONA

Apache—JOHN D. GUTHRIE, Forest Supervisor, Springerville (WU, P-WF); ALDO LEOPOLD, Forest Assistant.

Chiricahua—A. H. ZACHAU, Forest Supervisor, Douglas (WU, P-WF).

Coconino—FRANK C. W. POOLER, Forest Supervisor, Flagstaff (WU, P-WF); WIL-LARD M. DRAKE, Deputy Forest Supervisor; J. C. KIRCHER, Forest Assistant.

Coronado—ROBERT J. SELKIRK, Forest Supervisor, Tucson (WU, P-WF); W. F. SHERFESEE, Forest Assistant.

Crook—T. T. SWIFT, Forest Supervisor, Safford (WU-WF); H. L. JOHNSON, Forest Assistant.

Garces—W. H. B. KENT, Forest Supervisor, Nogales (WU-WF).

Prescott—C. H. HINDERER, Forest Supervisor, Prescott (WU-WF); J. C. MCNELTY, Deputy Forest Supervisor.

Sitgreaves—A. J. MACKAY, Forest Supervisor, Snowflake (WU, P-WF).

Tonto—R. G. WILLSON, Forest Supervisor, Roosevelt (WU-WF); J. W. FARMER, Deputy Forest Supervisor.

ARKANSAS

Arkansas—S. J. RECORD, Forest Supervisor, Mena (WU-WF); S. A. CHAPPELL, Deputy Forest Supervisor; FRANCIS KIEFER, Forest Assistant.
Ozark—DAVID E. FITTON, Forest Supervisor, Harrison (WU-WF); W. F. HILL, Deputy Forest Supervisor.

FLORIDA

Choctawhatchee }
Ocala } —Not under administration.

NEW MEXICO

Alamo—ARTHUR M. NEAL, Forest Supervisor, Alamogordo (WU, P-WF).
Carson—ROSS McMILLAN, Forest Supervisor, Antonito, Colo. (WU-G); FREDERICK R. STARR, Forest Assistant.
Chiricahua—See Arizona.
Datil—W. H. GODDARD, Forest Supervisor, Magdalena (WU, P-WF); R. F. BALTHIS, Deputy Forest Supervisor.
Gila—DOUGLAS RODMAN, Forest Supervisor, Silver City (WU-WF); FRANK E. ANDREWS, Deputy Forest Supervisor; H. G. CALKINS, Forest Assistant. Fort Bayard Nursery—H. C. TURNER, Forest Planting Assistant.
Jemez—THOS. R. STEWART, Forest Supervisor, Santa Fe (WU, P-WF); HARRY H. POOLER, Forest Agent.
Lincoln—J. A. KINNEY, Forest Supervisor, Capitan (WU, P-WF).
Manzano—W. R. MATTOON, Forest Supervisor, Albuquerque (WU, P-WF).
Pecos—THOS. R. STEWART, Forest Supervisor, Santa Fe (WU, P-WF); HARRY H. POOLER, Forest Agent. Las Gallinas Nursery—A. HEDRICKS, Forest Planting Assistant.
Zuni—A. D. READ, Forest Supervisor, Gallup (WU, P-WF); E. H. CRABB, Deputy Forest Supervisor.

OKLAHOMA

Wichita—FRANK RUSH, Acting Forest Supervisor, Cache (WU-WF).

DISTRICT 4

Utah, southern Idaho, western Wyoming, eastern Nevada, and northwestern Arizona.

Office, First National Bank Building, Ogden, Utah.

CLYDE LEAVITT, District Forester.

FRANKLIN W. REED, Assistant District Forester.

W. C. HENDERSON, District Law Officer.

H. P. DECHANT, Assistant District Law Officer.

OPERATION

R. P. IMES, Chief.

E. H. CLARKE, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, Q. R. CRAFT, District Fiscal Agent.

Maintenance, FELIX T. MOORE.

SILVICULTURE

L. L. WHITE, Chief.

O. M. BUTLER, Assistant Chief (in the Field).

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Idaho—

Reconnaissance of timber on Sawtooth National Forest—C. P. WILBER, Hailey.

Check scaling, Salmon National Forest—JOHN K. KIDD, Scaler, Salmon.

Reconnaissance and working plan for Minidoka National Forest—NILS B. ECKBO, Oakley.

Utah—

Reconnaissance and working plan for Manti National Forest—D. M. LANG, Ephraim.

Special timber sale work, Uinta and Ashley National Forests—DANIEL F. SEEREY, Lumberman, Provo.

Inspection of timber sales on Fishlake, Powell, Sevier, and Fillmore Forests—C. E. DUNSTON, Ogden.

Planting, J. M. FETHEROLF.

Silvics, E. R. HODSON.

PROJECT

Idaho—

Study of silvical qualities and growth of yellow pine and Douglas fir—E. R. HODSON, Salmon.

GRAZING

HOMER E. FENN, Chief.

A. C. MCCAIN, Assistant Chief.

SUPPLY DEPOT

A. M. SMITH, Property Clerk.

PROPERTY AUDIT

J. G. FALCK, Property Auditor.

NATIONAL FORESTS

ARIZONA

Dixie—See Utah.

Kaibab—JOHN H. CLARK, Forest Supervisor, Kanab, Utah (WU-WF); DANIEL K. JUDD, Deputy Forest Supervisor.

IDAHO

Boise—E. GRANDJEAN, Forest Supervisor, Boise (WU-P); WALTER A. HOPSON and D. C. A. GALARNEAU, Forest Assistants.

Cache—See Utah.

Caribou—N. E. SNELL, Forest Supervisor, Idaho Falls (WU-P); L. J. PHELAN, Deputy Forest Supervisor; JAMES H. JOHNSON, Grazing Assistant.

Challis—DAVID LAING, Forest Supervisor, Challis (WU-P); JOHN A. PEARSON, Deputy Forest Supervisor.

Idaho—HENRY A. BERGH, Forest Supervisor, Elo (WU-P).

Lemhi—C. I. HUDDLE, Forest Supervisor, Mackay (WU-P); JAMES L. PELTON, Deputy Forest Supervisor.

Minidoka—WM. MCCOY, Forest Supervisor, Oakley (WU-P); NILS B. ECKBO, Forest Assistant.

Payette—GUY B. MAINS, Forest Supervisor, Emmett (WU-P); CARL B. ARENTSON, Deputy Forest Supervisor.

Pocatello—CLINTON G. SMITH, Forest Supervisor, Pocatello (WU-P); A. L. BROWER, Forest Assistant; Pocatello Nursery—P. T. WRENSTED, Forest Ranger.

Salmon—GEORGE G. BENTZ, Forest Supervisor, Salmon (WU-P); JAS. M. RYAN, Deputy Forest Supervisor; F. T. MCLEAN, Forest Assistant.

Sawtooth—C. N. WOODS, Forest Supervisor, Hailey (WU-P); H. G. MCPHETERS, Deputy Forest Supervisor; FRANK J. RYDER and C. P. WILBER, Forest Assistants.

Targhee—DAVID BARNETT, Forest Supervisor, St. Anthony (WU-P); J. F. BRUINS, Deputy Forest Supervisor; CHESTER B. MORSE, Forest Assistant; LUCAS W. HASTINGS, Grazing Assistant.

Weiser—J. B. LAFFERTY, Forest Supervisor, Weiser (WU-P); W. M. CAMPBELL, Deputy Forest Supervisor; A. E. OMAN, Forest Assistant.

NEVADA

Humboldt—C. SYDNEY TREMEWAN, Forest Supervisor, Elko (WU-WF); W. W. BLAKESLEE, Deputy Forest Supervisor.

Moapa—HARRY E. MATHEWS, Acting Forest Supervisor, Las Vegas (WU-WF).

Nevada—R. F. MATHIAS, Acting Forest Supervisor, Ely (WU-WF); CHAS. F. PATTERSON, Deputy Forest Supervisor; RUDOLPH DIEFFENBACH, Forest Assistant.

Toiyabe—M. S. BENEDICT, Forest Supervisor, Austin (WU, P-WF).

UTAH

- Ashley**—W. M. ANDERSON, Forest Supervisor, Vernal (WU-WF).
Cache—J. E. ROTHERY, Acting Forest Supervisor, Logan (WU-P).
Dixie—JAMES E. JEWELL, Acting Forest Supervisor, St. George (WU-WF).
Fillmore—WM. HURST, Forest Supervisor, Beaver (WU-WF); GEORGE C. THOMPSON, Deputy Forest Supervisor; REESE W. TAYLOR, Forest Assistant.
Fishlake—CHARLES L. SMITH, Forest Supervisor, Salina (WU-WF); OLUF G. NIELSON, Deputy Forest Supervisor.
La Sal—JOHN RUS, Forest Supervisor, Moab (WU-WF).
Manti—A. W. JENSEN, Forest Supervisor, Ephraim (WU-WF); ERNEST WINKLER, Deputy Forest Supervisor; LINCOLN CROWELL, Forest Assistant; PARLEY CHRISTIANSEN, Grazing Assistant.
Minidoka—See Idaho.
Nebo—DAN S. PACK, Forest Supervisor, Nephi (WU-WF).
Pocatello—See Idaho.
Powell—GEO. H. BARNEY, Forest Supervisor, Escalante (WU-WF).
Sevier—O. C. SNOW, Forest Supervisor, Panguitch (WU-WF); FRANK W. SEAMAN, Deputy Forest Supervisor.
Uinta—W. I. PACK, Forest Supervisor, Provo (WU-WF); H. F. STUDLEY, Deputy Forest Supervisor; SIDNEY S. STEWART, Forest Assistant; W. JONES BOWEN, Grazing Assistant.
Wasatch—R. V. R. REYNOLDS, Acting Forest Supervisor, Salt Lake City (WU, P-WF, P); WILLIAM M. MCGHIE, Deputy Forest Supervisor; Wasatch Nursery—N. J. FETHEROLF, Forest Planting Assistant.

WYOMING

- Ashley**—See Utah.
Caribou—See Idaho.
Targhee—See Idaho.
Teton—R. E. MILLER, Forest Supervisor, Jackson (WU-P).
Wyoming—JOHN RAPHAEL, Forest Supervisor, Afton (WU-P); H. E. WOOLEY, Deputy Forest Supervisor; JOHN E. INGRAM, Forest Assistant; GLIDDEN J. BARSTOW, Grazing Assistant.

DISTRICT 5

California and southwestern Nevada.

Office, First National Bank Building, San Francisco, Cal.

F. E. OLMSTED, District Forester.

COERT DUBOIS, Assistant District Forester.

E. A. LANE, District Law Officer.

PAUL MITCHELL, Assistant District Law Officer.

OPERATION

ROY HEADLEY, Chief.

R. F. HAMMATT, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, CLARENCE WILEY, District Fiscal Agent.

Maintenance, A. L. DAHL.

SILVICULTURE

G. M. HOMANS, Chief.

T. D. WOODBURY, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Supervision of operations on the Standard Lumber Company's timber sale, Stanislaus National Forest—J. C. ELLIOTT, Sonora, Cal.

Collection of data for volume table for red fir (*A. magnifica*) on the Tahoe National Forest—S. A. WILSON and J. F. PERNOT, Nevada City, Cal.

Examination of timber trespass and of proposed sale areas in the recent addition to the Lassen National Forest—C. H. ENSIGN, Red Bluff, Cal.

Examination of proposed sale areas on the Trinity National Forest—L. MARGOLIN, Weaverville, Cal.

Planting, G. W. PEAVY; C. A. KUPFER, Assistant.

PROJECTS

Examination and mapping of lands suitable for planting on the Cleveland National Forest—C. A. KUPFER, San Diego, Cal.

Preparation of five-year planting plans and location of experimental planting areas on the Lassen, Trinity, Shasta, and Modoc National Forests—G. W. PEAVY.

Construction of a coniferous nursery, location of permanent experimental planting areas, and the collection of seed on the Shasta National Forest—N. O. TORSTENSON, Planting Assistant, California.

Silvics, Chief and Assistant Chief of Silviculture.

PROJECT

Establishment of sample plots and organization of silvical work—S. T. DANA, San Francisco, Cal.

GRAZING

M. B. ELLIOTT, Assistant Chief (in Charge).

PRODUCTS

C. S. SMITH, in Charge.

PROJECTS

Timber Tests—

Testing laboratory in cooperation with the University of California, Berkeley, Cal.—A. L. HEIM, in charge; assistants, G. R. GESSERT and A. K. ARMSTRONG.

Tests on California eucalypts;

Tests on redwood in cooperation with the California Redwood Association;

Tests on tanbark oak in cooperation with the Northwestern Redwood Company.

Wood Preservation—

Operation of an experimental wood-preserving plant in cooperation with the Southern Pacific Company—O. T. SWAN, San Francisco, Cal.

Experiments to determine the best methods of seasoning *Eucalyptus globulus* poles and logs, in cooperation with the estate of Adolph Sutro, The Pacific Land Investment Company, the Mount Tamalpais Cemetery Association, and the Parkside Realty Company; and *Eucalyptus viminalis* logs, in cooperation with the University of California—C. STOWELL SMITH, San Francisco, Cal.

Preservative treatment of willow fence posts, in cooperation with Jesus Maria Rancho—O. T. SWAN, San Francisco, Cal.

NATIONAL FORESTS

CALIFORNIA

Angeles—R. H. CHARLTON, Forest Supervisor, Los Angeles (WU, P-WF); ERNEST B. LONG, Deputy Forest Supervisor; Lytle Creek Nursery—SEROPE Y. PARNAY, Forest Planting Assistant, San Bernardino.

California—ERNEST BRITTEN, Forest Supervisor, Willows (P-WF); N. B. DREW, Deputy Forest Supervisor.

Cleveland—H. A. E. MARSHALL, Forest Supervisor, San Diego (WU, P-WF); PERCY L. DAY, Deputy Forest Supervisor; F. L. RICKEY, Planting Assistant.

Inyo—A. H. HOGUE, Forest Supervisor, Bishop (WU-WF); JOHN D. COFFMAN, Forest Assistant.

Klamath—R. L. FROMME, Forest Supervisor, Yreka (P-WF); FRANK W. HARLEY, Deputy Forest Supervisor; SINCLAIR W. ALLEN, Forest Assistant.

Lassen—L. A. H. KLING, Forest Supervisor, Red Bluff (P-WF); J. C. LA PLANT, Deputy Forest Supervisor.

Modoc—C. E. RACHFORD, Forest Supervisor, Alturas (P-WF); VERNON L. BONNER, Deputy Forest Supervisor; BELKNAP C. GOLDSMITH, Forest Assistant.

Mono—See Nevada.

Monterey—RAYMOND TYLER, Forest Supervisor, Salinas (WU-WF).

Plumas—L. A. BARRETT, Forest Supervisor, Quincy (WU-WF); W. G. DURBIN, Deputy Forest Supervisor; J. R. HALL, Forest Assistant.

Santa Barbara—WILLIS M. SLOSSON, Forest Supervisor, Santa Barbara (P-WF); H. G. MERRILL, Deputy Forest Supervisor.

Sequoia—E. A. SHERMAN, Forest Supervisor, Hot Springs, Tulare County (WU via Portersville-WF); W. C. BURTON, Deputy Forest Supervisor; W. M. MAULE, Forest Assistant.

Shasta—W. B. RIDER, Forest Supervisor, Sisson (P-WF); PHILIP T. HARRIS, Deputy Forest Supervisor; ALLEN H. HODGSON, Forest Assistant.

Sierra—C. H. SHINN, Forest Supervisor, Northfork (WU via Fresno-WF); H. J. TOMPKINS and WM. G. HOWARD, Forest Assistants.

Stanislaus—R. W. AYRES, Forest Supervisor, Sonora (WU-WF); D. N. ROGERS, Deputy Forest Supervisor; J. V. WOLFF, Forest Assistant.

Tahoe—R. L. P. BIGELOW, Forest Supervisor, Nevada City (WU-WF); M. B. PRATT, Deputy Forest Supervisor; J. ALFRED MITCHEL, Forest Assistant.

Trinity—F. H. HAFLEY, Forest Supervisor, Weaverville (WU-WF); W. A. HUESTIS, Deputy Forest Supervisor; ERNEST V. JOTTER, Forest Assistant.

NEVADA

Inyo—See California.

Mono—J. C. WELLS, Forest Supervisor, Gardnerville (WU-WF).

Tahoe—See California.

DISTRICT 6

Washington, Oregon, and Alaska.

Office, Beck Building, Portland, Oreg.

E. T. ALLEN, District Forester.

GEO. H. CECIL, Assistant District Forester.

C. R. PIERCE, District Law Officer.

W. F. STALEY, Assistant District Law Officer.

OPERATION

C. H. FLORY, Chief.

C. J. BUCK, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, A. H. COUSINS, District Fiscal Agent.

Maintenance, SHIRLEY BUCK.

SILVICULTURE

F. E. AMES, Chief.

C. S. JUDD, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Oregon—

Examination of proposed sale areas on the Rainier and Crater National Forests—W. T. ANDREWS, Lumberman, Portland.

Supervision of sales and sealing on the Fremont National Forest—J. P. HUGHES, Lumberman, Lakeview.

Sealing on Wind River Lumber Company timber sale, May 10, 1906, Columbia National Forest—EDWIN C. ERICKSON, Sealer, Carson, Wash.

Supervision of sales and sealing on the Crater National Forest—D. L. MCKAY, Jr., Sealer, Medford.

Planting, J. F. KÜMMEL.

PROJECT

Oregon—

Inspection of the Oregon and Siskiyou National Forests in preparation of plans for planting and sowing—J. F. KÜMMEL, Grants Pass.

Silvics, T. T. MUNGER.

PROJECT

Oregon—

Study of silvical qualities and growth of Douglas fir—T. T. MUNGER and F. G. MILLER, Portland; assistants, E. H. CHLOUPEK, E. H. HANZLIK, H. H. BARBUR, and J. A. BRINKLEY.

GRAZING

HOWARD K. O'BRIEN, Chief (in the Field).

T. P. MACKENZIE, Assistant Chief.

PRODUCTS

J. B. KNAPP, in Charge.

PROJECTS

Timber Tests—

Testing laboratory in cooperation with the University of Washington, Seattle, Wash.—O. P. M. Goss in charge; assistants, P. S. BUHL, C. W. ZIMMERMAN.

Tests of western larch in cooperation with the University of Washington and the Western Pine Manufacturers' Association.

Tests of fire-killed Douglas fir in cooperation with the Clarke County Timber Company and the Eastern and Western Lumber Company.

Supervision of the Forest Service timber-testing exhibit at the Alaska-Yukon-Pacific Exposition.

Wood Preservation—

Study of preservative processes used by commercial treating plants in Oregon and Washington—J. B. KNAPP, Portland, Oreg.

Wood Utilization—

Study of wood-using industries and markets for forest products—J. B. KNAPP, Portland, Oreg.

Study of the rate of deterioration and the usability of fire-killed timber—C. B. COX, Portland, Oreg.

Mill-scale study in cooperation with the Ketchikan Power Company—H. B. OAK-LEAF, Ketchikan, Alaska.

NATIONAL FORESTS**ALASKA**

Chugach—W. A. LANGILLE, Forest Supervisor, Ketchikan (SC, U. S. A., WU-AP); HOWARD M. CONRAD, Deputy Forest Supervisor; LAGE WERNSTEDT, Forest Assistant.

Tongass—W. A. LANGILLE, Forest Supervisor, Ketchikan (SC, U. S. A., WU-AP); HOWARD M. CONRAD, Deputy Forest Supervisor; LAGE WERNSTEDT, Forest Assistant.

CALIFORNIA

Crater—See Oregon.

Siskiyou—See Oregon.

OREGON

Cascade—C. R. SEITZ, Forest Supervisor, Eugene (WU, P-WF); J. R. HARVEY, Deputy Forest Supervisor; E. B. STARR, Forest Assistant.

Crater—M. L. ERICKSON, Forest Supervisor, Medford (WU, P-WF); S. S. SWENNING, Deputy Forest Supervisor; H. D. FOSTER and B. T. HARVEY, Forest Assistants.

Deschutes—A. S. IRELAND, Forest Supervisor, Prineville (PT & T-WF, via Shaniko).

Fremont—GUY M. INGRAM, Forest Supervisor, Lakeview (WU via Klamath Falls-WF); G. D. BROWN, Deputy Forest Supervisor.

Malheur—CY. J. BINGHAM, Forest Supervisor, John Day (WU via Baker City-WF via Baker City).

Oregon—T. H. SHERRARD, Forest Supervisor, Portland (WU, P-WF, N, P); RALPH S. SHELLEY, Deputy Forest Supervisor; W. B. OSBORNE, Forest Assistant.

Siskiyou—M. J. ANDERSON, Forest Supervisor, Grants Pass (WU, P-WF); HUGH M. GUTHRIE, Deputy Forest Supervisor; H. HAEFNER, Forest Assistant.

Siuslaw—A. E. COHOON, Forest Supervisor, Eugene (WU, P-WF); D. B. REYNOLDS, Forest Assistant.

Umatilla—THOS. E. CHIDSEY, Forest Supervisor, Heppner (WU-P).

Umpqua—S. C. BARTRUM, Forest Supervisor, Roseburg (WU, P-WF); H. M. HALE, Deputy Forest Supervisor; E. H. MCDANIELS, Forest Assistant.

Wallowa—HARVEY W. HARRIS, Acting Forest Supervisor, Wallowa (WU-P); SHERMAN A. BROWN, Deputy Forest Supervisor.

Wenaha—See Washington.

Whitman—HENRY IRELAND, Forest Supervisor, Sumpter (WU via Baker City-WF via Baker City).

WASHINGTON

- Chelan**—GEORGE W. MILHAM, Forest Supervisor, Chelan (PT & T-GN via Wenatchee); D. S. RICE, Deputy Forest Supervisor.
- Columbia**—H. O. STABLER, Forest Supervisor, Portland, Oreg. (WU, P-WF, N, P); ARTHUR R. WILCOX, Forest Assistant.
- Colville**—C. C. REID, Acting Forest Supervisor, Republic (WU, P-GN).
- Olympic**—FRED HANSON, Forest Supervisor, Olympia (WU-GN, N); E. E. FISHL, Deputy Forest Supervisor; MAX ROTHKUGEL, Forest Assistant.
- Rainier**—G. F. ALLEN, Forest Supervisor, Orting (WU-N); H. L. HURD, Deputy Forest Supervisor; C. P. WILLIS and E. J. FENBY, Forest Assistants.
- Snoqualmie**—B. P. KIRKLAND, Forest Supervisor, Seattle (WU, P-N, GN, WF); E. T. CLARK, Forest Assistant.
- Washington**—C. H. PARK, Forest Supervisor, Bellingham (WU, P-GN, N); A. A. PARKER, Deputy Forest Supervisor; F. H. BRUNDAGE, Forest Assistant.
- Wenaha**—J. M. SCHMITZ, Forest Supervisor, Walla Walla (WU-N, P).
- Wenatchee**—A. H. SYLVESTER, Forest Supervisor, Leavenworth (WU-GN); S. A. BLANKENSHIP, Deputy Forest Supervisor; FRED W. CLEATOR, Forest Assistant.

SERVICE CHANGES IN AUGUST

APPOINTED

Silviculture—

SILVICS: G. J. PIERCE, Collaborator.

FURLOUGHED

Products—

LABORATORY: CORNELIUS J. BARRY, Timber Testing Assistant.

CHANGE IN DESIGNATION

Products—

WOOD UTILIZATION: HOMER S. SACKETT, Chief, Office Wood Utilization.

LABORATORY: H. S. BETTS, Assistant Engineer, Forest Products Laboratory; H. S. BRISTOL, Expert and Chief, Office of Wood Chemistry; H. E. SURFACE, Engineer in Wood Chemistry; HOWARD F. WEISS, Chief, Office of Wood Preservation; J. M. NELSON, JR., Assistant Chief, Office of Wood Preservation; ROLF THELEN, Chief, Office of Timber Tests; WM. H. KEMPFER, Chief, Section of Maintenance, Forest Products Laboratory.

District 5—

ORGANIZATION: N. O. TORSTENSON, from Forest Supervisor to Planting Assistant.

RESIGNED

District 5—

SILVICULTURE: S. M. CROSS, Lumberman.

SEPARATED]

District 5—

STATE AND PRIVATE COOPERATION: FREDERICK F. THOMAS, JR., and GERALD D. KENNEDY, Forest Agents.

TRANSFERRED

District 1—

ORGANIZATION: J. S. BAIRD, Lumberman, from Superior National Forest to Lolo National Forest; ARETAS A. SAUNDERS, Forest Assistant, from Gallatin National Forest to Deerlodge National Forest.

PROMOTED

District 1—

ORGANIZATION: CLIFTON W. HUDSON, from Deputy Forest Supervisor to Forest Supervisor, Madison National Forest; EDWARD C. THENON, from Forest Ranger to Deputy Forest Supervisor, Clearwater National Forest; RALPH H. BUSHNELL, from Deputy Forest Supervisor to Forest Supervisor, Cabinet National Forest; GLEN A. SMITH, from Deputy Forest Supervisor to Forest Supervisor, Custer National Forest; JOHN H. CLACK, from Forest Ranger to Deputy Forest Supervisor, Flathead National Forest; WELLMAN HOLBROOK, from Forest Ranger to Deputy Forest Supervisor, Jefferson National Forest; EDWARD G. STAHL, from Deputy Forest Ranger to Deputy Forest Supervisor, Pend Oreille National Forest.

SERVICE NOTES FOR SEPTEMBER

These notes contain instructions and necessary information for Forest officers, and will, therefore, be carefully read and kept on file for reference.

OFFICE OF THE FORESTER

LAW

Uses, Railroads, and Power Plants—

Forest officers, in making their examinations and reports upon applications for railroad rights of way along streams, should always consider, as far as possible, necessary and feasible water-power developments along the streams, in order that proper conditions may be placed in stipulations to be filed by the railroad applicants, which will make it possible for the stream banks, especially in canyons, to be used and occupied for power development. In some cases it may be advisable to require the railroad applicants to so modify their maps as to locate the railroad at an elevation which will allow for water storage and other uses of the lands for power purposes.

Suit to Recover for Timber Cut—

On July 10, the United States Attorney for the Eastern District of Washington commenced suit against Thomas Cannon and the Entiat Lumber and Power Company, George H. Gray and Sons, proprietors, incorporated, to recover \$1,169, value of timber cut from the Wenatchee National Forest.

Coal Claims Held for Cancellation—

The Commissioner of the General Land Office has held for cancellation eight coal claims within the Siskiyou National Forest, on the ground that the claims did not contain workable coal. Selected specimens of the coal contained as low as 8 per cent ash, while the average ran from 25 to 40 per cent ash. The claims contained 90,922,740 feet of timber.

OPERATION

Location of Trail Grades—

Inspection of trail work done on the National Forests discloses a decided lack of proper care in locating the trails and laying out the grades.

As a rule, when a climb is to be made, the location of only one end of the grade is absolutely fixed. For example, when a ridge ends in a suitable point and it is desired to build a trail from the bottom of the point to the top of the ridge, it is usually of little consequence where the landing is made on top of the ridge; but the grade

must generally start from a certain point at the foot of the ridge. In such a case the survey should always begin at the lower end.

In the case of a trail from a creek to a saddle on the summit of a ridge, the conditions are reversed, and the survey should always begin at the summit.

Where trails are to be built up ridges, it is always preferable, if conditions permit, to build up the side of the ridge rather than to make short switch-backs up the end of the point.

Some kind of a level should always be used in laying out trails; no variations from an even grade should be permitted, except to avoid impassable country or excessive cost of construction. If no Brunton compass or clinometer is available, a hand level should be obtained. Fifteen per cent is an ideal grade for mountain country; twenty per cent is too high, and ten per cent is too low for a steady climb where the maximum rise is to be obtained with a minimum distance and minimum wear on horses.

Two Forests Under One Charge—

The Coronado and Garces National Forests in south central Arizona will be combined under one administration, with headquarters at Tucson, on September 1. The two Forests will retain their present names, and Supervisor Robert J. Selkirk, of the Coronado, will be in charge of both.

Preparation of Subvouchers—

The name of the individual, firm, or corporation from which the supplies or services are obtained should be entered at the top of the form. The name of the member concerned should appear in the receipt only at the bottom of the form.

Freight Charges—

Complaint has been made that in some cases it is impossible to secure the charges for freight shipments in advance from the shipping company's agent, as required by Service Order 30. When this difficulty arises, both the memorandum bill and the original should be sent to the consignee, with the request that he secure the charges from the last carrier's agent and either return the memorandum bill to the consignor or forward to the District Fiscal Agent, whichever may be necessary in the particular case.

Correct Use of Signatures—

Many Forest officers erroneously construe the instructions contained in the Field Program for May, 1908, regarding the signing of property, to apply as well to ordinary correspondence. Letters are often received by District Foresters from supervisors' offices signed by members other than the supervisor as "per" or "for the supervisor." When the supervisor is absent from his office all letters signed by the officer in charge should be as "Acting Forest Supervisor."

How to Post Forest Boundary Notices—

Recent field examinations have developed the fact that on a number of Forests the boundary notices have been placed along the line so as to face inward toward the Forest. The rangers who posted them probably believed that the notices should face the property designated. The value of a notice so placed is lost to those entering the Forest. Care should be taken to place boundary notices so that they will face away from the Forest.

SILVICULTURE

Silvics: Mensuration—

In each District Office, under Silvics, there should be a file of all completed volume, height, growth, form, and yield forest tables of western species. Copies of tables made either in the District Office or in a National Forest Office of one District should be sent by the District Forester to each other District and to the Forester. Tables intended for a report should be treated in the same way, since the Mensuration Table file should contain all forest tables of value.

The Use of Form 949—

The attention of supervisors is called to the use of Form 949 in reporting the timber sold and cut for each month on their respective Forests. These forms should invariably be used in making this report. Any forms prepared in supervisors' or District Offices for temporary use should be destroyed. Supervisors not having a supply can get the forms upon requisition of the Supply Depot, Ogden, Utah.

Report of Timber Settlements—

Supervisors should include, in their monthly reports of timber cut and sold, the amount of timber cut and sold under timber settlements during the month, in the same manner as for timber sales. Timber cut in trespass should not be included in the monthly reports.

SERVICE PUBLICATIONS ISSUED IN AUGUST

Circular 164. Properties and Uses of the Southern Pines.

SERVICE ORDERS

SERVICE ORDER 35

MONTHLY LIABILITY STATEMENT

AUGUST 5, 1909.

The Liability Statement (Form 159), hitherto rendered monthly, will hereafter be prepared at the end of each quarter only, beginning with September 30, 1909.

All sections of the Manual of Procedure in conflict with this order are hereby amended.

OVERTON W. PRICE,
Associate Forester.

SERVICE ORDER 36

PROCEDURE IN FREE USE

AUGUST 31, 1909.

Hereafter no record of individual free-use cases except those involving the approval of the District Forester will be kept in supervisors' offices. Rangers will retain the duplicate copy of each permit (Form 874-8), which will be filed alphabetically by name of permittee in a promise-card box. When a case is closed the date of closing and the amount and value of material secured will be entered on the back of the permit. The use of Form 874-14 will be discontinued.

At the end of the fiscal year, or at other times, if required by the supervisor, each ranger will submit a report giving the number of permits issued and the amount and value of material involved, together with the amount and value of the material actually taken by the permittees.

Cases requiring the approval of the District Forester should be handled in the same manner as timber-sale cases involving similar amounts, except that the amount of timber cut should not be included in the monthly statement sent to the District Forester by the supervisor, but the total should be reported by the ranger at the end of the year in his annual report.

Supervisors should inspect the conduct of free-use business, both field and office, as often as possible to see that the cases are closed promptly on expiration, and that the free-use policy for the Forest is being carried out. When it is necessary for a permit to be issued from the supervisor's office for the convenience of users, the duplicate should be sent at once to the ranger concerned, but, so far as possible, free-use permits should be issued only by rangers.

OVERTON W. PRICE,
Associate Forester.

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UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

GIFFORD PINCHOT, Forester

October Field Program 1909

This program of field work and assignments in the Forest Service is issued on the first day of each month and is for the exclusive use of members of the Service and cooperating bureaus. The names of members whose assignments are not yet fixed and reference to projects for which plans have not been matured are necessarily omitted. All orders and other instructions printed in the Field Program will apply to all Districts.

It is requested that the members of the Forest Service cooperate in making this program complete and accurate.

Unless the address of a member is given in this program or is definitely known, he should be addressed in care of the Forest Service, Washington, D. C.

FIELD PROGRAM FOR OCTOBER, 1909

OFFICE OF THE FORESTER 7

GIFFORD PINCHOT, Forester.

OVERTON W. PRICE, Associate Forester.

HARRY L. HILL, Secretary to the Forester.

P. P. WELLS, Law Officer.

A. C. SHAW, Assistant Law Officer.

HERBERT A. SMITH, Editor.

FINDLEY BURNS, in charge of Publication.

RAYMOND W. PULLMAN, in charge of Information.

GEORGE B. SUDWORTH, Dendrologist.

R. S. KELLOGG, Assistant Forester, engaged upon Forest Statistics.

EUGENE S. BRUCE, Expert Lumberman.

D. D. BRONSON, } General Inspectors.

R. E. BENEDICT, }

E. M. GRIFFITH, Special Inspector, Madison, Wis.

OPERATION 7

JAMES B. ADAMS, Assistant Forester, in Charge.

CHAS. S. CHAPMAN, Assistant Forester.

GEORGE G. ANDERSON, Assistant in Office Methods.

ACCOUNTS 7

H. B. CRAMER, Fiscal Agent.

E. A. MELZAR, District Fiscal Agent.

GEOGRAPHY

F. G. PLUMMER, Chief.

Atlas, G. B. BRUCE, Acting.

Drafting, C. A. KOLB.

Alienation, J. B. SATTERLEE.

Photography, A. G. VARELA.

MAINTENANCE

3/0 GEORGE A. BENTLEY, Chief.

SILVICULTURE

6

603 WILLIAM T. COX, Assistant Forester, in Charge.
E. E. CARTER, Assistant Forester.

STATE AND PRIVATE COOPERATION

J. G. PETERS, Chief.

PROJECTS

Alabama—

Preparation of a working-plan report for the Tennessee Coal, Iron and Railroad Company—E. D. CLARK, Washington, D. C.

Eastern States—

General inspection of nursery and planting work, in cooperation with States and private owners—E. O. SIECKE, Washington, D. C.

Preliminary examinations of forest land, in cooperation with private owners—J. H. FOSTER, Washington, D. C.

Kentucky—

Study of forest conditions in cooperation with State Board of Agriculture, Forestry, and Immigration—R. C. HALL, W. H. VON BAYER, J. M. BRISCOE, and O. D. INGALL, Washington, D. C.

Mississippi—

Preliminary examination of forest conditions, in cooperation with the State—C. E. DUNSTON, Jackson.

North Carolina—

Study of forest conditions, in cooperation with North Carolina Geological and Economic Survey—J. S. HOLMES, W. B. WILLEY, and A. W. WILLIAMSON, Chapel Hill.

South Carolina—

Preliminary examination of forest conditions, in cooperation with the State—W. M. MOORE, Columbia.

Virginia—

Preliminary examination of forest conditions, in cooperation with the State, and examinations of forest land, in cooperation with private owners—W. W. ASHE, Richmond.

SILVICS.

RAPHAEL ZON, Chief.

PROJECTS

General—

Basket willow study and seed testing and seed storage—N. H. GRUBB, Washington, D. C.

Completion of Austrian pine and cork oak studies—R. ZON, Washington, D. C.

Northeastern States—

Study of northern hardwoods—E. H. FROTHINGHAM, Bradford, Pa.

Remeasurement of permanent sample plots—C. R. TILLOTSON, Washington, D. C.

Computing, —

Library, Miss H. E. STOCKBRIDGE.

GRAZING

A. F. POTTER, Assistant Forester (in the Field).

L. F. KNEIPP, Assistant Forester (in Charge).

WILL C. BARNES, Inspector of Grazing (in the Field).

PROJECTS

Forage investigations; compilation of data—F. V. COVILLE, Botanist, Bureau of Plant Industry, in charge, Washington, D. C.; in charge of experimental pasture, JAMES T. JARDINE, Deputy Forest Supervisor, Wallowa, Oreg.; forage plant investigations, ARTHUR T. SAMPSON, Plant Ecologist, Wallowa, Oreg. (detailed to Bureau of Plant Industry under instructions of F. V. COVILLE, Botanist).

Identification of grasses and plants—Dr. EDWARD L. GREENE, Consulting Expert, Washington, D. C.

PRODUCTS

WM. L. HALL, Assistant Forester, in Charge.

McGARVEY CLINE, Assistant Forester.

WOOD PRESERVATION

HOWARD F. WEISS, in Charge.

PROJECTS

Construction and experimental operation of a wood-preserving plant, in cooperation with the Alabama Wood Preserving Company—EDWARD H. FORD, Birmingham, Ala.

Installation and operation of an experimental tie-treating plant, in cooperation with the Tennessee Coal, Iron and Railroad Company—EDWARD H. FORD, Birmingham, Ala.

Design and construction of apparatus for the prevention of sap stain and for a wood-preserving plant, in cooperation with the Great Southern Lumber Company—C. T. BARNUM, Madison, Wis.

Construction and experimental operation of a low-pressure wood-preserving plant, in cooperation with the War Department, Picatinny Arsenal—F. M. BOND, Dover, N. J.

Investigations of coal, petroleum, and wood-tar creosotes and their derivatives as possible wood preservatives—C. P. WINSLOW, Madison, Wis.

Investigations of wood substitutes—E. W. PETERS, Madison, Wis.

TIMBER TESTS

ROLF THELEN, in Charge.

PROJECTS

Correlation of file system and analysis of timber-test data—H. E. MCKENZIE and J. O. BIXBY.

Timber-testing laboratory, Madison, Wis., in cooperation with the University of Wisconsin—ROLF THELEN in charge:

Purchase and installation of machinery and equipment.

Design of wood-working shop and purchase of equipment.

Design of machine shop and purchase of equipment.

Timber-testing laboratory, Lafayette, Ind., in cooperation with Purdue University—W. K. HATT in charge; assistants, J. A. NEWLIN, THOMAS LYONS, and HARRY WEYLS:

Study of the effect of creosoting on the strength of southern pine, in cooperation with the Illinois Central Railway;

Study of the physical and mechanical properties of several species of hickory, in cooperation with the National Hickory Association;

Study of the physical and mechanical properties of red oak cross-ties treated by various preservative processes, in cooperation with the American Railway Engineering and Maintenance of Way Association.

WOOD CHEMISTRY

H. S. BRISTOL, in Charge.

H. E. SURFACE, Assistant.

PROJECTS

Study of methods of wood distillation and for the standardization and grading of turpentine—L. F. HAWLEY, at Madison, Wis.

Experiments with various woods for paper pulp—E. SUTERMEISTER; assistant, J. L. MERRILL, both at Washington, D. C.

Study of wood preservatives and of chemical problems in wood utilization—E. BATEMAN, at Washington, D. C.

WOOD UTILIZATION

H. S. SACKETT, in Charge.

PROJECTS

Markets—

Preparation of a market report for Chicago, Ill.—FRANKLIN H. SMITH, 1418 Fisher Building, Chicago, Ill.

Prices—

Collection of wholesale lumber prices in the markets and f. o. b. mill prices—FRANKLIN H. SMITH, 1418 Fisher Building, Chicago, Ill.

Wood Uses—

Study of the wood-using industries of Illinois—FRANKLIN H. SMITH, 1418 Fisher Building, Chicago, Ill.

Study of the wood-using industries of Kentucky, in cooperation with the State Board of Agriculture, Forestry, and Immigration—R. E. SIMMONS, 1418 Fisher Building, Chicago, Ill.

Study of the wood-using industries of Maryland, in cooperation with the State Board of Forestry—H. S. SACKETT, Washington, D. C.

Study of the wood-using industries of Massachusetts, in cooperation with F. W. RANE, State Forester, State House, Boston, Mass.—HU MAXWELL, Washington, D. C.

Study of the wood-using industries of North Carolina, in cooperation with the North Carolina Geological and Economic Survey—R. E. SIMMONS, 1418 Fisher Building, Chicago, Ill.

Study of the wood-using industries of Wisconsin, in cooperation with the State Board of Forestry—FRANKLIN H. SMITH, 1418 Fisher Building, Chicago, Ill.

Preparation of reports upon the uses of the principal commercial woods—HU MAXWELL, Washington, D. C.; W. L. HALL, Washington, D. C.

Waste—

Study of the waste incident to the manufacture of even lengths of flooring, ceiling siding, and finish in the white pine, yellow pine, and hardwood regions—H. S. SACKETT, Washington, D. C.

DISTRICTS

DISTRICT 1

Montana, northeastern Washington, northern Idaho, northwestern South Dakota, northern Michigan, northern Minnesota, and southwestern North Dakota.

Office, Hammond Block, Missoula, Mont.

W. B. GREELEY, District Forester.

F. A. SILCOX, Assistant District Forester.

W. M. AIKEN, District Law Officer.

E. B. QUIGGLE, Assistant District Law Officer.

OPERATION

R. H. RUTLEDGE, Chief.

R. Y. STUART, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, **H. I. LOVING**, District Fiscal Agent.

Maintenance, **R. L. CAMPBELL**.

SILVICULTURE

A. W. COOPER, Chief.

D. T. MASON, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Idaho—

Examination of timber, Kaniksu National Forest—**G. L. COTT**, Newport, Wash.

Montana—

Northern Pacific estimates—**KARL W. WOODWARD**, Missoula; Absaroka National Forest, **N. C. BROWN**, Livingston; Cabinet National Forest, **L. S. MURPHY**, Thomp-

son; Helena National Forest, W. B. PIPER and J. ST. J. BENEDICT, Helena; Kootenai National Forest, F. A. GAYLORD, Libby; Lolo National Forest, E. D. FLETCHER, Missoula.

Examination of timber, Deerlodge National Forest—J. S. BAIRD, Anaconda; Assistant, A. A. SAUNDERS.

Planting, Chief and Assistant Chief of Silviculture.

PROJECTS

Montana—

Supervision of fall sowing and planting experiments—E. C. CLIFFORD, Missoula.

Work on the Savenac nursery—G. B. McDONALD, Missoula.

Silvics, Chief and Assistant Chief of Silviculture.

PROJECTS

Idaho—

Preparation of yield tables, Coeur d'Alene National Forest—F. I. ROCKWELL, Wallace.

Montana—

Preparation of yield tables, Kootenai National Forest—E. I. TERRY, Libby.

Cooperation, Bureau of Entomology.

PROJECT

Location of insect-infested timber and determination of methods of local control—JOSEF BRUNNER, Field Agent, Bureau of Entomology, Columbia Falls, Mont.

GRAZING

C. H. ADAMS, Chief (in the Field).

W. S. PERRINE, Assistant Chief.

PRODUCTS

PROJECTS

Wood Preservation—

Construction and experimental operation of a wood-preserving plant for treating fence posts and other ranch timbers, in cooperation with the Bitter Root Stock Farm—P. R. HICKS, Missoula, Mont.

Construction and experimental operation of a wood-preserving plant for treating ties, mine timbers, and telephone poles, in cooperation with the Anaconda Copper Mining Company—P. R. HICKS, Missoula, Mont.

NATIONAL FORESTS

IDAHO

Beaverhead—See Montana.

Clearwater—F. A. FENN, Forest Supervisor, Kooskia (WU-N); EDW. C. THENON, Deputy Forest Supervisor.

Coeur d'Alene—W. G. WEIGLE, Forest Supervisor, Wallace (WU-N); E. R. BRUNKE, Deputy Forest Supervisor; F. I. ROCKWELL and WM. W. MORRIS, Forest Assistants.

Kaniksu—See Washington.

Nezperce—GEO. V. RING, Forest Supervisor, Grangeville (WU-N); J. ARTHUR BROWN, Deputy Forest Supervisor.

Pend Oreille—J. E. BARTON, Forest Supervisor, Sandpoint (WU-N, W); EDW. G. STAHL, Deputy Forest Supervisor; C. H. WILCOX, Forest Assistant.

MICHIGAN

Michigan }
Marquette } —S. M. HIGGINS, Acting Forest Supervisor, Au Sable.

MINNESOTA

Minnesota—G. E. MARSHALL, Forest Supervisor, Cass Lake (WU-GN).

Superior—SCOTT LEAVITT, Acting Forest Supervisor, Ely (WU-GN).

MONTANA

Absaroka—V. GIFFORD LANTRY, Forest Supervisor, Livingston (WU-N); J. A. FITZWATER, Deputy Forest Supervisor.

Beartooth—J. F. PRESTON, Acting Forest Supervisor, Red Lodge (WU-N).

Beaverhead—C. K. WYMAN, Forest Supervisor, Dillon (WU-P); R. J. MOORE, Deputy Forest Supervisor.

Bitterroot—W. W. WHITE, Forest Supervisor, Missoula (WU-N); M. N. STICKNEY, Forest Assistant.

Blackfeet—F. N. HAINES, Forest Supervisor, Kalispell (WU-GN); R. P. McLAUGHLIN, Deputy Forest Supervisor.

Cabinet—RALPH H. BUSHNELL, Forest Supervisor, Thompson Falls (WU-N); C. N. WHITNEY, Forest Assistant.

Custer—GLEN A. SMITH, Forest Supervisor, Ashland (WU via Forsyth-N via Forsyth).

Deerlodge—C. C. HALL, Forest Supervisor, Anaconda (P-N); HARRY C. SCHICK, Deputy Forest Supervisor; F. S. PATTON, Forest Assistant; ARETAS A. SAUNDERS, Forest Assistant.

Flathead—PAGE S. BUNKER, Forest Supervisor, Kalispell (WU-GN); JOHN H. CLACK, Deputy Forest Supervisor.

Gallatin—D. T. CONKLING, Forest Supervisor, Bozeman (WU-N).

Helena—DWIGHT BUSHNELL, Forest Supervisor, Helena (WU-N); J. D. WARNER, Deputy Forest Supervisor.

Jefferson—J. B. SEELY, Forest Supervisor, Great Falls (WU-N); WELLMAN HOLBROOK, Deputy Forest Supervisor; HENRY FARQUHAR, Forest Assistant.

Kootenai—DORR SKEELS, Acting Forest Supervisor, Libby (WU-GN); RUTLEDGE PARKER, Forest Assistant.

Lewis and Clark—W. H. DAUGS, Forest Supervisor, Chouteau (WU via Collins-GN via Collins).

Lolo—ELERS KOCH, Forest Supervisor, Missoula (WU, P-N); THOS. C. SPAULDING, Forest Assistant.

Madison—CLIFTON W. HUDSON, Forest Supervisor, Sheridan (WU-N); Jos. W. BUTLER, Forest Assistant.

Missoula—D. G. KINNEY, Forest Supervisor, Missoula (WU, P-N); RUSSELL G. POND, Deputy Forest Supervisor.

Sioux—See South Dakota.

NORTH DAKOTA

Dakota—C. A. BALLINGER, Forest Supervisor, Camp Crook, S. Dak. (WU via Bellefourche-Am via Bellefourche).

SOUTH DAKOTA

Sioux—C. A. BALLINGER, Forest Supervisor, Camp Crook (WU via Bellefourche-Am via Bellefourche).

WASHINGTON

Kaniksu—W. N. MILLAR, Forest Supervisor, Newport (WU-GN); WM. C. LATANE, Forest Assistant.

DISTRICT 2

Colorado, Wyoming, South Dakota, Nebraska, and western Kansas.

Office, Majestic Building, Denver, Colo.

SMITH RILEY, District Forester.

P. G. REDINGTON, Assistant District Forester.

J. F. LAWSON, Acting District Law Officer.

F. L. HARVEY (Claims).

OPERATION

FRED W. MORRELL, Chief.

C. J. STAHL, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, JOHN A. URBANOWICZ, District Fiscal Agent.

Maintenance, F. B. AGEE.

SILVICULTURE

A. K. CHITTENDEN, Chief.

S. L. MOORE, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Colorado—

Reconnaissance work, Leadville National Forest—J. BENTLEY, Jr., Dillon; assistants, J. E. ELLIOTT, Lumberman, E. C. BUNKER, R. H. THOMPSON, W. L. BARKER, and HENRY REINSCH.

Wyoming—

Special timber-sale work, Cheyenne National Forest—G. P. GREGG, Lumberman, and R. W. ALLEN, Laramie.

Planting, L. C. MILLER.

PROJECT

Colorado—

Preparation of five-year plans for planting and sowing for the Medicine Bow National Forest—R. G. PIERCE, Fort Collins.

Seed collecting on the Sopris National Forest—C. R. TAYLOR, Aspen.

Silvics, C. G. BATES.

PROJECTS

Colorado—

Silvical studies, Fremont Experiment Station—C. G. BATES and D. E. FINKBINER, Manitou.

Cooperation, Bureau of Entomology.

PROJECT

Location of insect-infested timber and determination of methods of local control—W. D. EDMONSTON, detailed from the Forest Service, Westcliffe, Colo.

GRAZING

J. W. NELSON, Chief.

E. N. KAVANAGH, Assistant Chief.

PRODUCTS

H. M. MASON, Acting, in Charge.

PROJECTS

Timber Tests—

Timber-testing laboratory in cooperation with the University of Colorado, Boulder, Colo.—NORMAN BETTS, in charge; assistants, A. D. WOLFF and H. V. BLANK.

Tests on round timbers of various Rocky Mountain species, including mine timbers, in cooperation with the Northern Coal and Coke Company and various National Forests.

Tests on western red cedar, lodgepole pine, and Engelmann spruce telephone poles in cooperation with the South Platte Power Company, Central Colorado Power Company, and the Colorado Telephone Company.

Wood Preservation—

Preservative treatment of telephone poles, in cooperation with the Colorado Telephone Company—D. L. CARMODY, Norrie, Colo.

Preservative treatment of telephone poles, in cooperation with Robert Reed for the Rifle Light, Heat and Power Company—D. L. CARMODY, Norrie, Colo.

Preservative treatment of transmission poles, in cooperation with the Central Colorado Power Company—D. L. CARMODY, Norrie, Colo.

Operation of National Forest treating plant for the Routt National Forest, treating drift-fence posts and telephone poles, and cooperation with ranchmen in treatment of fence posts, Steamboat Springs, Colo.

NATIONAL FORESTS

COLORADO

Arapaho—C. G. POOLE, Forest Supervisor, Fraser (WU-Ad); LEE E. COOPER, Deputy Forest Supervisor; G. W. HENDRY, Forest Assistant.

Battlement—DAVID ANDERSON, Forest Supervisor, Collbran (WU-WF, G); JOHN W. LOWELL, Jr., Deputy Forest Supervisor; STANLEY B. HALL, Forest Assistant.

Cochetopa—EUGENE WILLIAMS, Forest Supervisor, Saguache (WU-G).

Gunnison—WM. R. KREUTZER, Forest Supervisor, Gunnison (WU-WF, G); E. C. BERKY, Deputy Forest Supervisor.

Hayden—See Wyoming.

Holy Cross—HARRY H. FRENCH, Forest Supervisor, Glenwood Springs (WU-WF, G); ALBERT H. MILLER, Deputy Forest Supervisor.

La Sal—See Utah.

Las Animas—C. A. WHITNEY, Acting Forest Supervisor, La Veta (WU-G).

Leadville—THEODORE SHOEMAKER, Acting Forest Supervisor; R. E. CLARK, Deputy Forest Supervisor, Leadville (WU, P-WF, G); J. E. MARTIN, Forest Assistant.

Medicine Bow—H. N. WHEELER, Forest Supervisor; H. B. HOLROYD, Deputy Forest Supervisor, Fort Collins (WU-WF).

Montezuma—RESS PHILLIPS, Forest Supervisor, Mancos (WU-G); FRANK TOMPKINS, Deputy Forest Supervisor.

Pike—C. W. FITZGERALD, Forest Supervisor, Denver (WU, P-Ad, G, P, US, WF); C. M. GRANGER, Deputy Forest Supervisor; Monument Nursery—W. SCHRADER, Forest Planting Assistant; W. I. HUTCHINSON, Forest Assistant, Monument.

Rio Grande—A. L. STROUP, Forest Supervisor, Monte Vista (WU-G); WALTER F. BOWERS, Deputy Forest Supervisor.

Routt—J. H. RATLIFF, Forest Supervisor, Steamboat Springs (WU-Ad); C. A. SOMMERS, Deputy Forest Supervisor; P. J. PAXTON, Forest Assistant.

San Isabel—J. N. LANGWORTHY, Forest Supervisor, Westcliffe (WU-G).

San Juan—ERNEST W. SHAW, Forest Supervisor, Durango (WU-G); A. L. SWEITZER, Deputy Forest Supervisor; PETER KEPLINGER, Forest Assistant.
Sopris—JOHN McLAREN, Acting Forest Supervisor, Aspen (WU-WF, G); JAY HIGGINS, Forest Assistant.
Uncompahgre—HENRY L. SPENCER, Forest Supervisor, Delta (WU-G); HOWARD S. BUSHNELL, Deputy Forest Supervisor; J. H. RAMSKILL, Forest Assistant.
White River—JAMES A. BLAIR, Forest Supervisor, Meeker (WU-WF, G); ELMER E. STEPHENSON, Deputy Forest Supervisor.

KANSAS

Kansas—B. R. H. D'ALLEMAND, Forest Supervisor, Garden City (WU, P-WF); Garden City Nursery—C. R. TAYLOR, Forest Planting Assistant.

NEBRASKA

Nebraska—W. H. MAST, Forest Supervisor, Halsey (WU-Ad); H. R. SHOCKLEY, Deputy Forest Supervisor; Halsey Nursery—L. BESLEY and C. R. BECHTLE, Forest Planting Assistants.

SOUTH DAKOTA

Black Hills—PAUL D. KELLETER, Forest Supervisor, Deadwood (WU-Ad, Am); JOHN MURDOCH, Jr., and G. A. DUTHIE, Forest Assistants.

WYOMING

Bighorn—W. E. JACKSON, Forest Supervisor, Sheridan (WU-Ad); HERBERT GRAFF, Deputy Forest Supervisor.
Bonneville—FOSTER STEELE, Acting Forest Supervisor, Pinedale (WU-P); H. EARLE FRENCH, Deputy Forest Supervisor.
Cheyenne—P. S. LOVEJOY, Forest Supervisor, Laramie (WU, P-P); JOHN W. STEPHENS, Deputy Forest Supervisor; R. A. STRETCH, Forest Assistant.
Hayden—JAMES BLACKHALL, Forest Supervisor, Encampment (WU, P-P); ARTHUR M. COOK, Deputy Forest Supervisor.
Shoshone—H. W. THURSTON, Forest Supervisor, Cody (WU-Ad).
Sundance—G. W. LYTLE, Acting Forest Supervisor, Sundance (WU-Ad, Am).

DISTRICT 3

Arizona, Arkansas, Florida, New Mexico, and Oklahoma.
 Office, Strickler-Luna Building, Albuquerque, N. Mex.

A. C. RINGLAND, District Forester.
 E. H. CLAPP, Assistant District Forester.

H. B. JAMISON, District Law Officer.
 BLAKE FRANKLIN, Assistant District Law Officer.

OPERATION

A. O. WAHA, Chief.

A. S. PECK, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, J. J. DUFFY, District Fiscal Agent.

Maintenance, W. B. BUNTON.

SILVICULTURE

T. S. WOOLSEY, Jr., Chief.

A. B. RECKNAGEL, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Arizona—

Check scaling on the Coconino and Pecos National Forests—A. A. WYNNE, Flagstaff, Ariz., and Santa Fe, N. Mex.

Preparation of working plan report for Coconino National Forest—J. H. ALLISON, Flagstaff.

Special sales examination and reconnaissance, Apache National Forest—ALDO LEOPOLD, in charge; Assistants, REX KING, T. B. LONGWELL, S. D. SMITH, ROBERT MOAK. C. HELLER, Springerville.

New Mexico—

Preparation of working-plan report for Pecos watershed in the Pecos National Forest—I. F. ELDREDGE, Albuquerque; Party No. 1, BARRINGTON MOORE, in charge, L. L. JANES, W. BRADFIELD, and F. R. WIGELY, Las Vegas; Party No. 2, HARRY POOLER, in charge, T. E. WELLS, P. P. PITCHLYNN, and G. H. BOHN, Embudo.

Check scaling on the Datil and Gila National Forests—D. W. ADAMS, Silver City.

Planting, Chief and Assistant Chief of Silviculture.

Inspection of sowing and planting—R. E. ROGERS, Albuquerque, N. Mex.

Silvics, G. A. PEARSON, Coconino Forest Experiment Station, Flagstaff, Ariz.;

H. D. BURRALL, assistant, Coconino Forest Experiment Station, Flagstaff, Ariz.

GRAZING

J. K. CAMPBELL, Chief.

JOHN KERR, Assistant Chief.

NATIONAL FORESTS

ARIZONA

Apache—JOHN D. GUTHRIE, Forest Supervisor, Springerville (WU, P-WF); ALDO LEOPOLD, Forest Assistant.

Chiricahua—A. H. ZACHAU, Forest Supervisor, Portal (WU, P-WF).

- Coconino**—FRANK C. W. POOLER, Forest Supervisor, Flagstaff (WU, P-WF); WILLARD M. DRAKE, Deputy Forest Supervisor; J. C. KIRCHER, Forest Assistant.
- Coronado**—ROBERT J. SELKIRK, Forest Supervisor, Tucson (WU, P-WF); W. F. SHERFESEE, Forest Assistant.
- Crook**—T. T. SWIFT, Forest Supervisor, Safford (WU-WF); H. L. JOHNSON, Forest Assistant.
- Garces**—ROBERT J. SELKIRK, Forest Supervisor, Tucson (WU, P-WF).
- Prescott**—C. H. HINDERER, Forest Supervisor, Prescott (WU-WF); J. C. McNELTY, Deputy Forest Supervisor.
- Sitgreaves**—A. J. MACKAY, Forest Supervisor, Snowflake (WU, P-WF).
- Tonto**—R. G. WILLSON, Forest Supervisor, Roosevelt (WU-WF).

ARKANSAS

- Arkansas**—S. J. RECORD, Forest Supervisor, Mena (WU-WF); S. A. CHAPPELL, Deputy Forest Supervisor; FRANCIS KIEFER, Forest Assistant.
- Ozark**—W. F. HILL, Acting Forest Supervisor, Harrison (WU-WF).

FLORIDA

- Choctawhatchee** } —Not under administration.
Ocala }

NEW MEXICO

- Alamo**—ARTHUR M. NEAL, Forest Supervisor, Alamogordo (WU, P-WF).
- Carson**—ROSS McMILLAN, Forest Supervisor, Antonito, Colo. (WU-G); FREDERICK R. STARR, Forest Assistant.
- Chiricahua**—See Arizona.
- Datil**—W. H. GODDARD, Forest Supervisor, Magdalena (WU, P-WF); R. F. BALTHIS, Deputy Forest Supervisor.
- Gila**—DOUGLAS RODMAN, Forest Supervisor, Silver City (WU-WF); FRANK E. ANDREWS, Deputy Forest Supervisor; H. G. CALKINS, Deputy Forest Supervisor; Fort Bayard Nursery—H. C. TURNER, Forest Planting Assistant.
- Jemez**—THOS. R. STEWART, Forest Supervisor, Santa Fe (WU, P-WF); HARRY H. POOLER, Forest Agent.
- Lincoln**—J. A. KINNEY, Forest Supervisor, Capitan (WU, P-WF).
- Manzano**—W. R. MATTOON, Forest Supervisor, Albuquerque (WU, P-WF); JAMES F. MULLEN, Deputy Forest Supervisor.
- Pecos**—THOS. R. STEWART, Forest Supervisor, Santa Fe (WU, P-WF); HARRY H. POOLER, Forest Agent; Las Gallinas Nursery—A. HEDRICKS, Forest Planting Assistant.
- Zuni**—A. D. READ, Forest Supervisor, Gallup (WU, P-WF); E. H. CRABB, Deputy Forest Supervisor.

OKLAHOMA

- Wichita**—FRANK RUSH, Game Warden, in charge, Cache (WU-WF).

DISTRICT 4

Utah, southern Idaho, western Wyoming, eastern Nevada, and northwestern Arizona.

Office, First National Bank Building, Ogden, Utah.

CLYDE LEAVITT, District Forester.

FRANKLIN W. REED, Assistant District Forester.

W. C. HENDERSON, District Law Officer.

H. P. DECHANT, Assistant District Law Officer.

OPERATION

R. P. IMES, Chief.

E. H. CLARKE, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, **Q. R. CRAFT**, District Fiscal Agent.

Maintenance, **FELIX T. MOORE**.

SILVICULTURE

L. L. WHITE, Chief.

O. M. BUTLER, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Idaho—

Reconnaissance of timber on Sawtooth National Forest—**C. P. WILBER**, Hailey.

Check scaling, Salmon National Forest—**JOHN K. KIDD**, Scaler, Salmon.

Reconnaissance and working plan for Minidoka National Forest—**NILS B. ECKBO**, Oakley.

Reconnaissance and working plan for Pocatello National Forest—**A. L. BROWER**, Pocatello.

Utah—

Reconnaissance and working plan for Manti National Forest—**D. M. LANG**, Ephraim.

Special timber sale work, Kaibab National Forest—**DANIEL F. SEEREY**, Lumberman, Ogden.

Inspection of timber sales on Fishlake, Powell, Sevier, and Fillmore Forests—**C. E. DUNSTON**, Ogden.

Planting, J. M. FETHEROLF.
Silvics, E. R. HODSON.

PROJECT

Idaho—

Study of the effects of grazing on forest conditions, Caribou National Forest—
E. R. HODSON, Idaho Falls.

GRAZING

HOMER E. FENN, Chief.
A. C. McCAIN, Assistant Chief.

SUPPLY DEPOT

A. M. SMITH, Property Clerk.

PROPERTY AUDIT

J. G. FALCK, Property Auditor.

NATIONAL FORESTS

ARIZONA

Dixie—See Utah.

Kaibab—JOHN H. CLARK, Forest Supervisor, Kanab, Utah (WU-WF); DANIEL K. JUDD, Deputy Forest Supervisor.

IDAHO

Boise—E. GRANDJEAN, Forest Supervisor, Boise (WU-P); D. C. A. GALARNEAU, Forest Assistant.

Cache—See Utah.

Caribou—N. E. SNELL, Forest Supervisor, Idaho Falls (WU-P); L. J. PHELAN, Deputy Forest Supervisor; JAMES H. JOHNSON, Grazing Assistant.

Challis—DAVID LAING, Forest Supervisor, Challis (WU-P); JOHN A. PEARSON, Deputy Forest Supervisor.

Idaho—HENRY A. BERGH, Forest Supervisor, Elo (WU-P).

Lemhi—C. I. HUDDLE, Forest Supervisor, Mackay (WU-P); JAMES L. PELTON, Deputy Forest Supervisor.

Minidoka—WM. MCCOY, Forest Supervisor, Oakley (WU-P); NILS B. ECKBO, Forest Agent.

Payette—GUY B. MAINS, Forest Supervisor, Emmett (WU-P); CARL B. ARENTSON, Deputy Forest Supervisor.

Pocatello—J. F. BRUNS, Acting Forest Supervisor, Pocatello (WU-P); A. L. BROWER, Forest Assistant; Pocatello Nursery—P. T. WRENSTED, Forest Ranger.

Salmon—GEORGE G. BENTZ, Forest Supervisor, Salmon (WU-P); JAS. M. RYAN, Deputy Forest Supervisor; F. T. MCLEAN, Forest Assistant.

Sawtooth—C. N. WOODS, Forest Supervisor, Hailey (WU-P); H. G. MCPHETERS, Deputy Forest Supervisor; FRANK J. RYDER and C. P. WILBER, Forest Assistants.
Targhee—DAVID BARNETT, Forest Supervisor, St. Anthony (WU-P); CHESTER B. MORSE, Forest Assistant; LUCAS W. HASTINGS, Grazing Assistant.
Weiser—J. B. LAFFERTY, Forest Supervisor, Weiser (WU-P); W. M. CAMPBELL, Deputy Forest Supervisor; A. E. OMAN, Forest Assistant.

NEVADA

Humboldt—C. SYDNEY TREMEWAN, Forest Supervisor, Elko (WU-WF); W. W. BLAKESLEE, Deputy Forest Supervisor.
Moapa—HARRY E. MATHEWS, Acting Forest Supervisor, Las Vegas (WU-WF).
Nevada—R. F. MATHIAS, Acting Forest Supervisor, Ely (WU-WF); CHAS. F. PATTERSON, Deputy Forest Supervisor; RUDOLPH DIEFFENBACH, Forest Assistant.
Toiyabe—M. S. BENEDICT, Forest Supervisor, Austin (WU, P-WF).

UTAH

Ashley—W. M. ANDERSON, Forest Supervisor, Vernal (WU-WF).
Cache—CLINTON G. SMITH, Forest Supervisor, J. E. ROTHERY, Deputy Forest Supervisor, Logan (WU-P).
Dixie—JAMES E. JEWELL, Acting Forest Supervisor, St. George (WU-WF).
Fillmore—WM. HURST, Forest Supervisor, Beaver (WU-WF); GEORGE C. THOMPSON, Deputy Forest Supervisor; REESE W. TAYLOR, Forest Assistant.
Fishlake—CHARLES L. SMITH, Forest Supervisor, Salina (WU-WF); OLUF G. NIELSON, Deputy Forest Supervisor.
La Sal—JOHN RUS, Forest Supervisor, Moab (WU-WF).
Manti—A. W. JENSEN, Forest Supervisor, Ephraim (WU-WF); ERNEST WINKLER, Deputy Forest Supervisor; LINCOLN CROWELL, Forest Assistant; PARLEY CHRISTIANSEN, Grazing Assistant.
Minidoka—See Idaho.
Nebo—DAN S. PACK, Forest Supervisor, Nephi (WU-WF).
Pocatello—See Idaho.
Powell—GEO. H. BARNEY, Forest Supervisor, Escalante (WU-WF).
Sevier—O. C. SNOW, Forest Supervisor, Panguitch (WU-WF); FRANK W. SEAMAN, Deputy Forest Supervisor.
Uinta—W. I. PACK, Forest Supervisor, Provo (WU-WF); H. F. STUDLEY, Deputy Forest Supervisor; SIDNEY S. STEWART, Forest Assistant; W. JONES BOWEN, Grazing Assistant.
Wasatch—R. V. R. REYNOLDS, Acting Forest Supervisor, Salt Lake City (WU, P-WF, P); WILLIAM M. MCGHIE, Deputy Forest Supervisor; Wasatch Nursery—N. J. FETHEROLF, Forest Planting Assistant.

WYOMING

Ashley—See Utah.
Caribou—See Idaho.
Targhee—See Idaho.

Teton—R. E. MILLER, Forest Supervisor, Jackson (WU-P).

Wyoming—JOHN RAPHAEL, Forest Supervisor, Afton (WU-P); H. E. WOOLEY, Deputy Forest Supervisor; JOHN E. INGRAM, Forest Assistant; GLIDDEN J. BARSTOW, Grazing Assistant.

DISTRICT 5

California and southwestern Nevada.

Office, First National Bank Building, San Francisco, Cal.

F. E. OLMSTED, District Forester.

COERT DUBOIS, Assistant District Forester.

E. A. LANE, District Law Officer.

PAUL MITCHELL, Assistant District Law Officer.

OPERATION

ROY HEADLEY, Chief.

R. F. HAMMATT, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, CLARENCE WILEY, District Fiscal Agent.

Maintenance, ———

SILVICULTURE

G. M. HOMANS, Chief.

T. D. WOODBURY, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Supervision of operations on the Standard Lumber Company's timber sale, Stanislaus National Forest—J. C. ELLIOTT, Sonora, Cal.

Examination of timber trespass and of proposed sale areas in the recent addition to the Lassen National Forest—C. H. ENSIGN, Red Bluff, Cal.

Marking timber and examination of sales, Mono and Inyo National Forests—SWIFT BERRY, Bishop, Cal.

Planting, G. W. PEAVY; C. A. KUPFER, Assistant.

PROJECTS

Preparation of five-year planting plans and location of experimental planting areas on the Lassen, Trinity, Shasta, and Modoc National Forests—G. W. PEAVY.

Construction of a coniferous nursery, location of permanent experimental planting areas, and the collection of seed on the Shasta National Forest—N. O. TORSTENSON, Planting Assistant, California.

Preparation of a plan for experimental eucalypts planting in southern California—J. M. GRANT, Los Angeles, Cal.

Silvics, Chief and Assistant Chief of Silviculture.

GRAZING

JOHN H. HATTON, Chief.

M. B. ELLIOTT, Assistant Chief.

PRODUCTS

C. S. SMITH, in Charge.

PROJECTS

Timber Tests—

Testing laboratory in cooperation with the University of California, Berkeley, Cal.—A. L. HEIM, in charge; assistants, G. R. GESSERT and A. K. ARMSTRONG:

Tests on California eucalypts;

Tests on redwood in cooperation with the California Redwood Association;

Tests on tanbark oak in cooperation with the Northwestern Redwood Company.

Wood Preservation—

Operation of an experimental wood-preserving plant in cooperation with the Southern Pacific Company—O. T. SWAN, San Francisco, Cal.

Experiments to determine the best methods of seasoning *Eucalyptus globulus* poles and logs, in cooperation with the estate of Adolph Sutro, the Pacific Land Investment Company, the Mount Tamalpais Cemetery Association, and the Parkside Realty Company; and *Eucalyptus viminalis* logs, in cooperation with the University of California—C. STOWELL SMITH, San Francisco, Cal.

Preservative treatment of willow fence posts, in cooperation with Jesus Maria Rancho—O. T. SWAN, San Francisco, Cal.

NATIONAL FORESTS

CALIFORNIA

Angeles—R. H. CHARLTON, Forest Supervisor, Los Angeles (WU, P-WF); ERNEST B. LONG, Deputy Forest Supervisor; Lytle Creek Nursery—SEROPE Y. PARNAY, Forest Planting Assistant, San Bernardino.

California—ERNEST BRITTEN, Forest Supervisor, Willows (P-WF); N. B. DREW, Deputy Forest Supervisor.

Cleveland—H. A. E. MARSHALL, Forest Supervisor, San Diego (WU, P-WF) PERCY L. DAY, Deputy Forest Supervisor; F. L. RICKEY, Planting Assistant.

Inyo—A. H. HOGUE, Forest Supervisor, Bishop (WU-WF); JOHN D. COFFMAN, Forest Assistant.

- Klamath**—R. L. FROMME, Forest Supervisor, Yreka (P-WF); FRANK W. HARLEY, Deputy Forest Supervisor; SHIRLEY W. ALLEN, Forest Assistant.
- Lassen**—L. A. H. KLING, Forest Supervisor, Red Bluff (P-WF); J. C. LA PLANT, Deputy Forest Supervisor; HENRY L. BOLDENWECK, Forest Agent.
- Modoc**—C. E. RACHFORD, Forest Supervisor, Alturas (P-WF); VERNON L. BONNER, Deputy Forest Supervisor; BELKNAP C. GOLDSMITH, Forest Assistant.
- Mono**—See Nevada.
- Monterey**—RAYMOND TYLER, Forest Supervisor, Salinas (WU-WF).
- Plumas**—L. A. BARRETT, Forest Supervisor, Quincy (WU-WF); W. G. DURBIN, Deputy Forest Supervisor; J. R. HALL, Forest Assistant.
- Santa Barbara**—WILLIS M. SLOSSON, Forest Supervisor, Santa Barbara (P-WF); H. G. MERRILL, Deputy Forest Supervisor.
- Sequoia**—E. A. SHERMAN, Forest Supervisor, Hot Springs, Tulare County (WU via Portersville-WF); W. C. BURTON, Deputy Forest Supervisor; W. M. MAULE, Forest Assistant.
- Shasta**—W. B. RIDER, Forest Supervisor, Sisson (P-WF); PHILIP T. HARRIS, Deputy Forest Supervisor; ALLEN H. HODGSON, Forest Assistant.
- Sierra**—C. H. SHINN, Forest Supervisor, Northfork (WU via Fresno-WF); H. J. TOMPKINS and WM. G. HOWARD, Forest Assistants.
- Stanislaus**—R. W. AYRES, Forest Supervisor, Sonora (WU-WF); D. N. ROGERS, Deputy Forest Supervisor; J. V. WOLFF, Forest Assistant.
- Tahoe**—R. L. P. BIGELOW, Forest Supervisor, Nevada City (WU-WF); M. B. PRATT, Deputy Forest Supervisor; J. ALFRED MITCHEL, Forest Assistant.
- Trinity**—F. H. HAFLEY, Forest Supervisor, Weaverville (WU-WF); W. A. HUDESTIS, Deputy Forest Supervisor; ERNEST V. JOTTER, Forest Assistant.

NEVADA

- Inyo**—See California.
- Mono**—J. C. WELLS, Forest Supervisor, Gardnerville (WU-WF).
- Tahoe**—See California.

DISTRICT 6

Washington, Oregon, and Alaska.

Office, Beck Building, Portland, Oreg.

E. T. ALLEN, District Forester.

GEO. H. CECIL, Assistant District Forester.

C. R. PIERCE, District Law Officer.

W. F. STALEY, Assistant District Law Officer.

OPERATION

C. H. FLORY, Chief.

C. J. BUCK, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, A. H. COUSINS, District Fiscal Agent.

Maintenance, SHIRLEY BUCK.

SILVICULTURE

F. E. AMES, Chief.

C. S. JUDD, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Oregon—

Examination of proposed sale areas on the Crater National Forest—W. T. ANDREWS, Lumberman, Medford.

Supervision of sales and scaling on the Fremont National Forest—J. P. HUGHES, Lumberman, Lakeview.

Scaling on the Crater National Forest—D. L. MCKAY, Jr., Scaler, Medford.

Supervision of sales on National Forests in eastern Oregon—N. F. MACDUFF, Forest Assistant.

Washington—

Scaling on important sales, Olympic National Forest—EDWIN C. ERICKSON, Scaler, Olympia.

Reconnaissance of Olympic National Forest—MAX ROTHKUGEL, Forest Assistant, Olympia.

Planting, J. F. KÜMMEL.

Silvics, T. T. MUNGER.

PROJECT

Oregon and Washington—

Study of silvical qualities and growth of Douglas fir—T. T. MUNGER, Forest Assistant, Portland, Oreg.

GRAZING

HOWARD K. O'BRIEN, Chief (in the Field).

T. P. MACKENZIE, Assistant Chief.

PRODUCTS

J. B. KNAPP, in Charge.

PROJECTS

Timber Tests—

Testing laboratory in cooperation with the University of Washington, Seattle, Wash.—O. P. M. GOSS in charge; assistants, P. S. BUHL, C. W. ZIMMERMAN.

Tests of air-dried Douglas fir, in cooperation with the Oregon and Washington Lumber Manufacturers' Association.

Tests of fire-killed Douglas fir in cooperation with the Clarke County Timber Company and the Eastern and Western Lumber Company.

Supervision of the Forest Service timber-testing exhibit at the Alaska-Yukon-Pacific Exposition.

Wood Preservation—

Investigation of the possibilities for the preservative treatment of posts and poles used for improvement work on the National Forests in District 6—H. B. OAKLEAF, Portland, Oreg.

Wood Utilization—

Study of wood-using industries and markets for forest products—J. B. KNAPP, Portland, Oreg.

Study of the waste due to the manufacture of even lengths only in planing-mill products—J. B. KNAPP, Portland, Oreg.

NATIONAL FORESTS

ALASKA

Chugach—W. A. LANGILLE, Forest Supervisor, Ketchikan (SC, U. S. A., WU-AP); HOWARD M. CONRAD, Deputy Forest Supervisor; LAGE WERNSTEDT, Forest Assistant.

Tongass—W. A. LANGILLE, Forest Supervisor, Ketchikan (SC, U. S. A., WU-AP); HOWARD M. CONRAD, Deputy Forest Supervisor; LAGE WERNSTADT, Forest Assistant.

CALIFORNIA

Crater—See Oregon.

Siskiyou—See Oregon.

OREGON

Cascade—C. R. SEITZ, Forest Supervisor, Eugene (WU, P-WF); J. R. HARVEY, Deputy Forest Supervisor; E. B. STARR, Forest Assistant.

Crater—M. L. ERICKSON, Forest Supervisor, Medford (WU, P-WF); S. S. SWENNING, Deputy Forest Supervisor; H. D. FOSTER, and B. T. HARVEY, Forest Assistants.

Deschutes—A. S. IRELAND, Forest Supervisor, Prineville (PT & T-WF, via Shaniko).

Fremont—GUY M. INGRAM, Forest Supervisor, Lakeview (WU via Klamath Falls-WF); G. D. BROWN, Deputy Forest Supervisor.

Malheur—CY. J. BINGHAM, Forest Supervisor, John Day (WU via Baker City-WF via Baker City).

Oregon—T. H. SHERRARD, Forest Supervisor, Portland (WU, P-WF, N, P); RALPH S. SHELLEY, Deputy Forest Supervisor; W. B. OSBORNE, Forest Assistant.

Siskiyou—M. J. ANDERSON, Forest Supervisor, Grants Pass (WU, P-WF); HUGH M. GUTHRIE, Deputy Forest Supervisor; H. HAEFNER, Forest Assistant.

Siuslaw—A. E. COHOON, Forest Supervisor, Eugene (WU, P-WF); DAVID E. FITTON, Deputy Forest Supervisor.

- Umatilla**—THOS. E. CHIDSEY, Forest Supervisor, Heppner (WU-P).
Umpqua—S. C. BARTRUM, Forest Supervisor, Roseburg (WU, P-WF); H. M. HALE, Deputy Forest Supervisor; E. H. McDANIELS, Forest Assistant.
Wallowa—HARVEY W. HARRIS, Acting Forest Supervisor, Wallowa (WU-P); SHERMAN A. BROWN, Deputy Forest Supervisor.
Wenaha—See Washington.
Whitman—HENRY IRELAND, Forest Supervisor, Sumpter (WU via Baker City-WF via Baker City).

WASHINGTON

- Chelan**—GEORGE W. MILHAM, Forest Supervisor, Chelan (PT & T-GN via Wenatchee); D. S. RICE, Deputy Forest Supervisor; D. B. REYNOLDS, Forest Assistant.
Columbia—HOMER ROSS, Acting Forest Supervisor, Portland, Oreg. (WU, P-WF, N, P); ARTHUR R. WILCOX, Forest Assistant.
Colville—C. C. REID, Acting Forest Supervisor, Republic (WU, P-GN).
Olympic—FRED HANSON, Forest Supervisor, Olympia (WU-GN, N); E. E. FISHIL, Deputy Forest Supervisor; MAX ROTHKUGEL, Forest Assistant.
Rainier—G. F. ALLEN, Forest Supervisor, Orting (WU-N); H. L. HURD, Deputy Forest Supervisor; C. P. WILLIS and E. J. FENBY, Forest Assistants.
Snoqualmie—B. P. KIRKLAND, Forest Supervisor, Seattle (WU, P-N, GN, WF); E. T. CLARK, Forest Assistant.
Washington—C. H. PARK, Forest Supervisor, Bellingham (WU, P-GN, N); A. A. PARKER, Deputy Forest Supervisor; F. H. BRUNDAGE and M. L. MERRITT, Forest Assistants.
Wenaha—J. M. SCHMITZ, Forest Supervisor, Walla Walla (WU-N, P).
Wenatchee—A. H. SYLVESTER, Forest Supervisor, Leavenworth (WU-GN); S. A. BLANKENSHIP, Deputy Forest Supervisor; FRED W. CLEATOR, Forest Assistant.

SERVICE CHANGES IN SEPTEMBER

APPOINTED

Products—

WOOD UTILIZATION: ROGER E. SIMMONS, Expert.

District 2—

ORGANIZATION: STANLEY B. HALL, Forest Assistant; W. I. HUTCHINSON, Forest Assistant.

District 5—

SILVICULTURE: J. M. GRANT, Forest Expert.

RESTORED TO THE ROLLS

Forester—

INSPECTION: D. D. BRONSON, General Inspector.

Products—

LABORATORY: CORNELIUS BARRY, Testing Assistant.

FURLOUGHED**Products—**

LABORATORY: JOHN M. NELSON, Jr., Assistant Chief, Wood Preservation.

Silviculture—

STATE AND PRIVATE COOPERATION: NORMAN H. GRUBB, Expert.

District 2—

ORGANIZATION: W. J. MORRILL, Deputy Forest Supervisor; P. T. COOLIDGE, Forest Assistant; J. M. CATES, Law Officer; R. E. MESNARD, District Engineer.

CHANGE IN DESIGNATION**Silviculture—**

STATE AND PRIVATE COOPERATION: F. W. BESLEY, Forest Assistant.

RESIGNED**Silviculture—**

SILVICS: EDWIN A. ZIEGLER, Chief, Section of Computing.

Products—

WOOD CHEMISTRY: F. E. LICHTENTHAELER, Laboratory Assistant in Wood Chemistry.

District 2—

ORGANIZATION: F. C. SPENCER, Forest Supervisor; F. S. THOMSON, Deputy Forest Supervisor.

District 5—

OPERATION: A. L. DAHL, Chief of Maintenance.

APPOINTMENT TERMINATED**Silviculture—**

FEDERAL COOPERATION: E. A. BRANIFF, Forest Supervisor; MARK L. BURNS, Lumberman.

TRANSFERRED**Products—**

WOOD CHEMISTRY: CARL F. SPEH, Laboratory Assistant in Wood Chemistry, to Bureau of Chemistry.

District 2—

ORGANIZATION: THEODORE SHOEMAKER, Jr., Deputy Forest Supervisor, San Isabel National Forest, to Leadville National Forest.

PROMOTED**District 2—**

ORGANIZATION: T. C. HATTON, Assistant Forest Ranger, Rio Grande National Forest, to Deputy Forest Supervisor, Sopris National Forest; H. B. HOLROYD, Forest Assistant, Office of Products, to Deputy Forest Supervisor, Medicine Bow National Forest; R. E. CLARK, Forest Assistant, Black Hills National Forest, to Deputy Forest Supervisor, Leadville National Forest.

SEPARATED**District 2—**

ORGANIZATION: CLARENCE H. MURCH, Expert Miner.

District 5—

SILVICULTURE: S. A. WILSON and J. F. PERNOT, Forest Agents.

In October Field Program, page 123, under "Operation," "Numbering of Freight Bills of Lading," sixth line, the word "numbered" should read "unnumbered."

SERVICE NOTES FOR OCTOBER

These notes contain instructions and necessary information for Forest officers, and will, therefore, be carefully read and kept on file for reference.

OFFICE OF THE FORESTER

LAW

Action against the Northern Pacific—

Action against the Northern Pacific Railway Company was requested of the Department of Justice for the recovery of damages amounting to \$5,299.50 for the destruction of 2,540,950 feet of timber on the Snoqualmie National Forest by fire caused by sparks from an engine of the railway company.

Commercial Power Plants: Amendment of Use Book—

The Use Book is hereby amended by crossing out the first sentence under the title "Power Plants," on page 65, and inserting, instead, the following:

The term "commercial power plants" as used in these regulations and instructions includes all hydro-electric power plants except those used solely by the permittees themselves for municipal or mining purposes.

OPERATION

Numbering Freight Bills of Lading—

Freight bills of lading, in the future, will be numbered consecutively before issue by the Property Clerk, using one set of serial numbers for the whole Forest Service. This will do away with the necessity for the serial number and key initial provided for on page 289 of the June Field Program. The Property Clerk at Ogden will furnish these numbered forms to all members of the Service, who use bills of lading, upon receipt of which the numbered forms on hand should be returned to him. If a supply is not received within a reasonable time requisition should be made.

Monthly Service Report—

The attention of Forest officers is called to the revised Form 347, "Monthly Service Report," referred to in Service Order 37. An initial supply has been sent to each Supervisor. The Supervisor will secure on this form the monthly distribution of the services of every member of the Forest force whose salary is charged against the

salary allotment, and the annual report of distribution of services compiled from the monthly reports will give the basis of ascertaining in the Washington office, in accordance with the classification given in the form, the distribution of the total amount disbursed in salaries. The services of the Supervisor, Deputy Supervisor, and clerks should be accounted for under "Miscellaneous Executive Duties." It will be noted that the detailed classification is restricted to actual work and that time in which no work is performed will be given only in the summary. The last line in the summary, "Sundays and holidays, no work performed," will be used to account for all days upon which, because of weather or other conditions, neither field nor office work is done. Men engaged upon improvement or other work which occupies the full time, however, will charge days upon which no work can be done to the particular project or line of work. The classes of work have been made fewer and more comprehensive, and the changes will not prevent the Supervisor from regrouping the classes given in reports already made on the old form for the first three months of the fiscal year in compiling his annual report of distribution of service.

SILVICULTURE

Cooperation in Insect Control Work—

The Bureau of Entomology will, as rapidly as possible, place a district field agent of its Branch of Forest Insect Investigations in each of the National Forest Districts. The names and addresses of these agents will appear in the Field Program each month. Hereafter information of bodies of unhealthy or dying timber or of any timber showing evidence of infestation should be sent directly to the proper district field agent, accompanied by notes on accessibility, and, when possible, by specimens. These reports will be investigated, so far as possible, by the district field agent, the danger to National Forest timber determined, and recommendations, prepared by the Bureau of Entomology, sent to the District Forester. The application of these recommendations to the infested area will be carried out under the orders of the District Forester; but every advantage should be taken of the opportunity to secure suggestions from the district field agent for the best methods of carrying out the essential details. He should always be notified what work is planned and be given an opportunity to be present at the time it is done, if it be possible for him to do so. The district field agent should also be supplied with reports of the result of any work done in combating insect infestation on National Forests within the district. For the present, district field agents will be placed in Districts 1 and 2 only. The foregoing procedure will be put in effect in other districts on notification of the assignment of agents.

SERVICE PUBLICATION ISSUED IN SEPTEMBER

Circular 167. The Status of Forestry in the United States.

SERVICE ORDERS

SERVICE ORDER 37

(Amends Use Book instructions, pp. 184-187, and supersedes Office Order 12, Feb. 18, 1909, and circular letters OO of Dec. 21, 1907, and Oct. 2, 1908.)

DIARIES

SEPTEMBER 15, 1909.

Hereafter each member of the Forest Service, when traveling in the field, will keep a diary in the regular field notebook, in which he will record each day his work and movements.

The keeping of this diary, which is enjoined upon Supervisors, Rangers, and Guards (Use Book, pp. 184-185, 186-187), will be continued and extended to include all men employed upon National Forests except clerks and laborers. The diaries of the Supervisors and Deputy Supervisors will be examined and initialed by executive officers who visit the Forest. The diaries of all other members of the Forest force will be examined and initialed by the Supervisor or Deputy Supervisor. All diaries of Forest officers will constitute a part of the permanent records of the Forest, and when a Forest officer leaves the Service his diary will be turned in to the Supervisor.

Circular letter OO of October 2, 1908, requiring the Supervisor to keep a summary of his detailed diary on Forms 874-2 and 874-3, is hereby revoked. Hereafter the monthly service report on these forms, which has hitherto been sent to the Supervisor on the first of the month (Use Book, p. 185), will be discontinued except upon Forests where its continuance is specifically ordered by the District Forester.

The certificate of service hitherto made by Forest officers on Form 874-3 will hereafter be made on Form 347, revised August 5, 1909, "Monthly Service Report."

OVERTON W. PRICE,

Associate Forester.

SERVICE ORDER 38

(Amends Manual of Procedure, pp. 57-58, and Service Order 33.)

NOTIFICATION OF RECEIPT

SEPTEMBER 24, 1909.

Beginning November 1, 1909, the Notification of Receipt (Form 26) will be discontinued. The second and third paragraphs under "Receipts and Refunds" (Manual of Procedure, pp. 57-58) are hereby amended to read as follows:

"Daily remittances received will be recorded by the depository on an abstract of receipts (Form 25), of which two copies will be furnished to the District Fiscal Agent,

accompanied by a copy of the certificate of deposit covering all entries on the abstract for the same day and also by the original letters of transmittal (Form 861). The abstracts of receipts will bear the numbers of the corresponding certificates of deposits, and at the end of each quarter the totals will be summarized on sheets of the same form.

"The District Fiscal Agent will check the original letter of transmittal (Form 861) against the abstract of receipts, the receipts of the amount remitted will be acknowledged by the District Fiscal Agent on the letter by rubber stamp, and the letter of transmittal sent to the Supervisor concerned. The Supervisor will immediately make the necessary entries on his records and send the receipted letter of transmittal to the remitter."

"The Supervisor will at the same time inform the Ranger concerned that payment has been received. Except in remittances for grazing fees, when the Ranger's duplicate permit will be sufficient notice, this information will be given the Ranger by sending him, with an appropriate notation, the duplicate letter of transmittal held by the Supervisor."

The two paragraphs headed "Record of Receipts" in Service Order 33 are hereby revoked and Form 27 restored to use. The paragraph headed "Analysis of Receipts" (Manual of Procedure, p. 58) is amended to read as follows:

"Analysis of receipts.—From the abstract of receipts each deposit will be entered separately by classes under Forests on sheets (Form 27) which will be kept in a loose-leaf binder. Each day's entries will be proved by comparison with the total on the abstract."

OVERTON W. PRICE,
Associate Forester.

RECENT SERVICE ORDERS

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UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

GIFFORD PINCHOT, Forester

November Field Program 1909

This program of field work and assignments in the Forest Service is issued on the first day of each month and is for the exclusive use of members of the Service and cooperating bureaus. The names of members whose assignments are not yet fixed and reference to projects for which plans have not been matured are necessarily omitted. All orders and other instructions printed in the Field Program will apply to all Districts.

It is requested that the members of the Forest Service cooperate in making this program complete and accurate.

Unless the address of a member is given in this program or is definitely known, he should be addressed in care of the Forest Service, Washington, D. C.

FIELD PROGRAM FOR NOVEMBER, 1909

OFFICE OF THE FORESTER

GIFFORD PINCHOT, Forester.

OVERTON W. PRICE, Associate Forester.

HARRY L. HILL, Secretary to the Forester.

P. P. WELLS, Law Officer.

A. C. SHAW, Assistant Law Officer.

HERBERT A. SMITH, Editor.

FINDLEY BURNS, in charge of Publication.

RAYMOND W. PULLMAN, in charge of Information.

GEORGE B. SUDWORTH, Dendrologist.

R. S. KELLOGG, Assistant Forester, engaged upon Forest Statistics.

EUGENE S. BRUCE, Expert Lumberman.

D. D. BRONSON, General Inspector.

E. M. GRIFFITH, Special Inspector, Madison, Wis.

OPERATION

JAMES B. ADAMS, Assistant Forester, in Charge.

CHAS. S. CHAPMAN, Assistant Forester.

GEORGE G. ANDERSON, Assistant in Office Methods.

ACCOUNTS

H. B. CRAMER, Fiscal Agent.

E. A. MELZAR, District Fiscal Agent.

GEOGRAPHY

F. G. PLUMMER, Chief.

Atlas, G. B. BRUCE, Acting.

Drafting, C. A. KOLB.

Alienation, J. B. SATTERLEE.

Photography, A. G. VARELA.

MAINTENANCE

GEORGE A. BENTLEY, Chief.

SILVICULTURE

WILLIAM T. COX, Assistant Forester, in Charge.
E. E. CARTER, Assistant Forester.

STATE AND PRIVATE COOPERATION

J. G. PETERS, Chief (in the Field).
J. H. FOSTER, Acting Chief.

PROJECTS

Alabama—

Preparation of a working-plan report for the Tennessee Coal, Iron and Railroad Company—E. D. CLARK, Washington, D. C.

Eastern States—

General inspection of nursery and planting work, in cooperation with States and private owners—E. O. SIECKE, Washington, D. C.

Kentucky—

Preparation of a report on forest conditions, in cooperation with State Board of Agriculture, Forestry, and Immigration—R. C. HALL, W. H. VON BAYER, J. M. BRISCOE, and O. D. INGALL, Washington, D. C.

Mississippi—

Preliminary examination of forest conditions, in cooperation with the State—C. E. DUNSTON, Jackson.

North Carolina—

Study of forest conditions, in cooperation with North Carolina Geological and Economic Survey—J. S. HOLMES, W. B. WILLEY, and A. W. WILLIAMSON, Chapel Hill.

South Carolina—

Preliminary examination of forest conditions, in cooperation with the State—W. M. MOORE, Columbia.

Virginia—

Preliminary examination of forest conditions, in cooperation with the State, and examination of forest land, in cooperation with private owners—W. W. ASHE, Richmond.

SILVICS

RAPHAEL ZON, Chief (in the Field).
S. T. DANA, Acting Chief.

PROJECTS

General—

Basket willow study and seed testing and seed storage—N. H. GRUBB, Washington, D. C.

Northeastern States—

Study of northern hardwoods—E. H. FROTHINGHAM, Washington, D. C.

Remeasurement of permanent sample plots—C. R. TILLOTSON, Bradford, Pa.

Forest Measurements, W. B. BARROWS (in the Field).

Compilation, Miss M. C. GANNETT.

Library, Miss H. E. STOCKBRIDGE.

GRAZING

A. F. POTTER, Assistant Forester, in Charge.

L. F. KNEIPP, Assistant Forester.

WILL C. BARNES, Inspector of Grazing (in the Field).

PROJECTS

Forage investigations; compilation of data—F. V. COVILLE, Botanist, Bureau of Plant Industry, in charge, Washington, D. C.; preparation of report on experimental pasture project, JAMES T. JARDINE, Deputy Forest Supervisor, Washington, D. C.; preparation of report on forage plant investigations, ARTHUR T. SAMPSON, Plant Ecologist, Washington, D. C. (detailed to Bureau of Plant Industry under instructions of F. V. COVILLE, Botanist).

Identification of grasses and plants—Dr. EDWARD L. GREENE, Consulting Expert, Washington, D. C.

PRODUCTS

WM. L. HALL, Assistant Forester, in Charge.

LABORATORY

In cooperation with the University of Wisconsin.

MCGARVEY CLINE, Director, Madison, Wis.

WOOD PRESERVATION

HOWARD F. WEISS, in Charge, Madison, Wis.

Projects

Construction and experimental operation of a wood-preserving plant, in cooperation with the Alabama Wood Preserving Company—EDWARD H. FORD, Birmingham, Ala.

Installation and operation of an experimental tie-treating plant, in cooperation with the Tennessee Coal, Iron and Railroad Company—EDWARD H. FORD, Birmingham, Ala.

Design and construction of apparatus for the prevention of sap stain and for a wood-preserving plant, in cooperation with the Great Southern Lumber Company—C. T. BARNUM, Madison, Wis.

Construction and experimental operation of a low-pressure wood-preserving plant, in cooperation with the War Department, Picatinny Arsenal—F. M. BOND, Dover, N. J.

Investigations of coal, petroleum, and wood-tar creosotes and their derivatives as possible wood preservatives—C. P. WINSLOW, Madison, Wis.

Investigations of wood substitutes—E. W. PETERS, Madison, Wis.

TIMBER TESTS

ROLF THELEN, in Charge, Madison, Wis.

Projects

Timber-testing laboratory, ROLF THELEN, in charge, Madison, Wis.:

Purchase and installation of machinery and equipment.

Design of wood-working shop and purchase of equipment.

Design of machine shop and purchase of equipment.

Correlation of file system and analysis of timber-test data—H. E. MCKENZIE and J. O. BIXBY.

Timber-testing laboratory, Lafayette, Ind., in cooperation with Purdue University—W. K. HART in charge; assistants, J. A. NEWLIN, THOMAS LYONS, and HARRY WEYLS:

Study of the effect of creosoting on the strength of southern pine, in cooperation with the Illinois Central Railway;

Study of the physical and mechanical properties of several species of hickory, in cooperation with the National Hickory Association;

Study of the physical and mechanical properties of red oak cross-ties treated by various preservative processes, in cooperation with the American Railway Engineering and Maintenance of Way Association.

WOOD CHEMISTRY

H. S. BRISTOL, in Charge, Madison, Wis.

H. E. SURFACE, Assistant, Madison, Wis.

Projects

Study of methods of wood distillation and for the standardization and grading of turpentine—L. F. HAWLEY, at Madison, Wis.

Experiments with various woods for paper pulp—E. SUTERMEISTER; assistant, J. L. MERRILL, both at Washington, D. C.

Study of wood preservatives and of chemical problems in wood utilization—E. BATEMAN, at Washington, D. C.

WOOD TECHNOLOGY

H. D. TIEMANN, in Charge, Washington, D. C.

Projects

Design of experimental apparatus for technological work in Forest Products Laboratory—H. D. TIEMANN.

Study of the effect of methods of drying upon the physical properties of wood—H. D. TIEMANN.

Study of microscopical structure of American woods—C. D. MELL and W. D. BRUSH.

MAINTENANCE

W. H. KEMPFER, in Charge, Madison, Wis.

WOOD UTILIZATION

H. S. SACKETT, in Charge, Fisher Building, Chicago, Ill.

PROJECTS**Markets—**

Preparation of a market report for Chicago, Ill.—FRANKLIN H. SMITH, Fisher Building, Chicago, Ill.

Prices—

Collection of wholesale lumber prices in the markets and f. o. b. mill prices—FRANKLIN H. SMITH, Fisher Building, Chicago, Ill.

Wood Uses—

Study of the wood-using industries of Illinois—FRANKLIN H. SMITH, Fisher Building, Chicago, Ill.

Study of the wood-using industries of Wisconsin, in cooperation with the State Board of Forestry—FRANKLIN H. SMITH, Fisher Building, Chicago, Ill.

Study of the wood-using industries of Kentucky, in cooperation with the State Board of Agriculture, Forestry, and Immigration—R. E. SIMMONS, Fisher Building, Chicago, Ill.

Study of the wood-using industries of North Carolina, in cooperation with the North Carolina Geological and Economic Survey—R. E. SIMMONS, Fisher Building, Chicago, Ill.

Study of the wood-using industries of Maryland, in cooperation with the State Board of Forestry—HU MAXWELL, Washington, D. C.

Study of the wood-using industries of Massachusetts, in cooperation with F. W. RANE, State Forester, State House, Boston, Mass.—HU MAXWELL, Washington, D. C.

Preparation of reports upon the uses of the principal commercial woods—HU MAXWELL, Washington, D. C.; W. L. HALL, Washington, D. C.

Waste—

Study of the waste incident to the manufacture of even lengths of flooring, ceiling, siding, and finish in the white pine, yellow pine, and hardwood regions—CHAS. F. HATCH, Fisher Building, Chicago, Ill.

DISTRICTS

DISTRICT 1

Montana, northeastern Washington, northern Idaho, northwestern South Dakota northern Michigan, northern Minnesota, and southwestern North Dakota.

Office, Hammond Block, Missoula, Mont.

W. B. GREELEY, District Forester.

F. A. SILCOX, Assistant District Forester.

W. M. AIKEN, District Law Officer.

E. B. QUIGGLE, Assistant District Law Officer.

OPERATION

R. H. RUTLEDGE, Chief.

R. Y. STUART, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, **H. I. LOVING**, District Fiscal Agent.

Maintenance, **R. L. CAMPBELL**.

SILVICULTURE

A. W. COOPER, Chief.

D. T. MASON, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Idaho—

Examination of timber, Kaniksu National Forest—**G. L. COTT**, Lumberman, Newport, Wash.

Montana—

Northern Pacific estimates—**KARL W. WOODWARD**, Missoula; Absaroka National Forest, **N. C. BROWN**, Livingston; Cabinet National Forest, **L. S. MURPHY**, Missoula; Helena National Forest, **W. B. PIPER** and **J. ST. J. BENEDICT**, Helena; Kootenai

National Forest, F. A. GAYLORD, Libby; Lolo National Forest, E. D. FLETCHER Missoula.

Examination of timber, Deerlodge National Forest—J. S. BAIRD, Lumberman, Anaconda; Assistant, A. A. SAUNDERS.

Planting, E. C. CLIFFORD.

PROJECTS

Montana—

Supervision of fall sowing and planting experiments—E. C. CLIFFORD, Missoula.

Supervision of experimental sowing, Sioux National Forest—G. B. McDONALD, Camp Crook, S. Dak.

Silvics, Chief and Assistant Chief of Silviculture.

PROJECTS

Idaho—

Preparation of yield tables, Cœur d'Alene National Forest—F. I. ROCKWELL, Wallace.

Montana—

Preparation of yield tables, Kootenai National Forest—E. I. TERRY, Libby.

Cooperation, Bureau of Entomology.

PROJECT

Location of insect-infested timber and determination of methods of local control—JOSEF BRUNNER, Field Agent, Bureau of Entomology, Columbia Falls, Mont.

GRAZING

C. H. ADAMS, Chief (in the Field).

W. S. PERRINE, Assistant Chief.

PRODUCTS

PROJECTS

Wood Preservation—

Construction and experimental operation of a wood-preserving plant for treating fence posts and other ranch timbers, in cooperation with the Bitter Root Stock Farm—P. R. HICKS, Missoula, Mont.

Construction and experimental operation of a wood-preserving plant for treating ties, mine timbers, and telephone poles, in cooperation with the Anaconda Copper Mining Company—P. R. HICKS, Missoula, Mont.

NATIONAL FORESTS

IDAHO

Beaverhead—See Montana.

Clearwater—F. A. FENN, Forest Supervisor, Kooskia (WU-N); EDW. C. THENON, Deputy Forest Supervisor.

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Coeur d'Alene—W. G. WEIGLE, Forest Supervisor, Wallace (WU-N); E. R. BRUNKE, Deputy Forest Supervisor; F. I. ROCKWELL and WM. W. MORRIS, Forest Assistants.

Kaniksu—See Washington.

Nezperce—GEO. V. RING, Forest Supervisor, Grangeville (WU-N); J. ARTHUR BROWN, Deputy Forest Supervisor.

Pend Oreille—J. E. BARTON, Forest Supervisor, Sandpoint (WU-N, W); EDW. G. STAHL, Deputy Forest Supervisor; C. H. WILCOX, Forest Assistant.

MICHIGAN

Michigan }
Marquette }—S. M. HIGGINS, Acting Forest Supervisor, Au Sable (WU-Am).

MINNESOTA

Minnesota—G. E. MARSHALL, Forest Supervisor, Cass Lake (WU-GN).

Superior—SCOTT LEAVITT, Acting Forest Supervisor, Ely (WU-GN).

MONTANA

Absaroka—V. GIFFORD LANTRY, Forest Supervisor, Livingston (WU-N); J. A. FITZWATER, Deputy Forest Supervisor.

Beartooth—J. F. PRESTON, Acting Forest Supervisor, Red Lodge (WU-N).

Beaverhead—C. K. WYMAN, Forest Supervisor, Dillon (WU-P); R. J. MOORE, Deputy Forest Supervisor.

Bitterroot—W. W. WHITE, Forest Supervisor, Missoula (WU-N); M. N. STICKNEY, Forest Assistant; C. H. GREGORY, Lumberman.

Blackfeet—F. N. HAINES, Forest Supervisor, Kalispell (WU-GN); R. P. McLAUGHLIN, Deputy Forest Supervisor.

Cabinet—RALPH H. BUSHNELL, Forest Supervisor, Thompson Falls (WU-N); C. N. WHITNEY, Forest Assistant.

Custer—GLEN A. SMITH, Forest Supervisor, Ashland (WU via Forsyth-N via Forsyth).

Deerlodge—C. C. HALL, Forest Supervisor, Anaconda (P-N); HARRY C. SCHICK, Deputy Forest Supervisor; F. S. PATTON, Forest Assistant; ARETAS A. SAUNDERS, Forest Assistant.

Flathead—PAGE S. BUNKER, Forest Supervisor, Kalispell (WU-GN); JOHN H. CLACK, Deputy Forest Supervisor.

Gallatin—D. T. CONKLING, Forest Supervisor, Bozeman (WU-N).

Helena—DWIGHT BUSHNELL, Forest Supervisor, Helena (WU-N); J. D. WARNER, Deputy Forest Supervisor.

Jefferson—J. B. SEELY, Forest Supervisor, Great Falls (WU-N); WELLMAN HOLBROOK, Deputy Forest Supervisor; HENRY FARQUHAR, Forest Assistant.

Kootenai—DORR SKEELS, Acting Forest Supervisor, Libby (WU-GN); RUTLEDGE PARKER and E. I. TERRY, Forest Assistants.

Lewis and Clark—W. H. DAUGS, Forest Supervisor, Chouteau (WU via Collins-GN via Collins).

Lolo—ELERS KOCH, Forest Supervisor, Missoula (WU, P-N); THOS. C. SPAULDING, Forest Assistant.
Madison—CLIFTON W. HUDSON, Forest Supervisor, Sheridan (WU-N); Jos. W. BUTLER, Forest Assistant.
Missoula—D. G. KINNEY, Forest Supervisor, Missoula (WU, P-N); RUSSELL G. POND, Deputy Forest Supervisor; A. J. NORTON, Lumberman.
Sioux—See South Dakota.

NORTH DAKOTA

Dakota—C. A. BALLINGER, Forest Supervisor, Camp Crook, S. Dak. (WU via Bellefourche-Am via Bellefourche).

SOUTH DAKOTA

Sioux—C. A. BALLINGER, Forest Supervisor, Camp Crook (WU via Bellefourche-Am via Bellefourche).

WASHINGTON

Kaniksu—W. N. MILLAR, Forest Supervisor, Newport (WU-GN); WM. C. LATANE, Forest Assistant.

DISTRICT 2

Colorado, Wyoming, South Dakota, Nebraska, and western Kansas.

Office, Majestic Building, Denver, Colo.

SMITH RILEY, District Forester.

P. G. REDINGTON, Assistant District Forester.

J. F. LAWSON, Acting District Law Officer.

F. L. HARVEY, Acting Assistant District Law Officer.

OPERATION

FRED W. MORRELL, Chief.

C. J. STAHL, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, JOHN A. URBANOWICZ, District Fiscal Agent.

Maintenance, F. B. AGEE.

SILVICULTURE

A. K. CHITTENDEN, Chief.

S. L. MOORE, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECT

Wyoming—

Special timber-sale work, Cheyenne National Forest—R. W. ALLEN, Milo.

Planting, L. C. MILLER.

PROJECTS

Colorado—

Preparation of five-year plans for planting and sowing for the Medicine Bow National Forest—R. G. PIERCE, Fort Collins.

Seed collecting on the Sopris National Forest—C. R. TAYLOR, Aspen.

Silvics, C. G. BATES.

PROJECT

Colorado—

Silvical studies, Fremont Experiment Station—C. G. BATES, A. G. HAMEL, and D. E. FINKBINER, Manitou.

Cooperation, Bureau of Entomology.

PROJECT

Location of insect-infested timber and determination of methods of local control—W. D. EDMONSTON, detailed from the Forest Service, Westcliffe, Colo.

GRAZING

J. W. NELSON, Chief.

E. N. KAVANAGH, Assistant Chief.

PRODUCTS

H. M. MASON, JR., Acting, in Charge.

PROJECTS

Timber Tests—

Timber-testing laboratory in cooperation with the University of Colorado, Boulder, Colo.—NORMAN BETTS, in charge; assistants, A. D. WOLFF and H. V. BLANK.

Tests on round timbers of various Rocky Mountain species, including mine timbers, in cooperation with the Northern Coal and Coke Company, Rocky Mountain Fuel Company, and various National Forests.

Tests on western red cedar, lodgepole pine, and Engelmann spruce telephone poles in cooperation with the South Platte Power Company, Central Colorado Power Company, and the Colorado Telephone Company.

Wood Preservation—

Preservative treatment of telephone poles, in cooperation with Robert Reed for the Rifle Light, Heat and Power Company—D. L. CARMODY, Norrie, Colo.

Preservative treatment of transmission poles, in cooperation with the Central Colorado Power Company—D. L. CARMODY, Norrie, Colo.

Preservative treatment of mine props, in cooperation with the Colorado Fuel and Iron Company—D. L. CARMODY, Norrie, Colo.

Preliminary investigation for determining the feasibility of wood preservation of the mine timbers of the Smuggler-Union Mining Company—H. M. MASON, Jr, Telluride, Colo.

NATIONAL FORESTS**COLORADO**

Arapaho—C. G. POOLE, Forest Supervisor, Fraser (WU-Ad); LEE E. COOPER, Deputy Forest Supervisor; G. W. HENDRY, Forest Assistant.

Battlement—JOHN W. LOWELL, Jr., Acting Forest Supervisor, Collbran (WU-WF, G).

Cochetopa—EUGENE WILLIAMS, Forest Supervisor, Saguache (WU-G).

Gunnison—WM. R. KREUTZER, Forest Supervisor, Gunnison (WU-WF, G); E. C. BERKY, Deputy Forest Supervisor; STANLEY B. HALL, Forest Assistant.

Hayden—See Wyoming.

Holy Cross—HARRY H. FRENCH, Forest Supervisor, Glenwood Springs (WU-WF, G); ALBERT H. MILLER, Deputy Forest Supervisor.

La Sal—See Utah.

Las Animas—C. A. WHITNEY, Acting Forest Supervisor, La Veta (WU-G).

Leadville—THEODORE SHOEMAKER, Acting Forest Supervisor, Leadville (WU, P-WF, G); R. E. CLARK, Deputy Forest Supervisor; J. E. MARTIN, Forest Assistant.

Medicine Bow—H. N. WHEELER, Forest Supervisor, Fort Collins (WU-WF); H. B. HOLROYD, Deputy Forest Supervisor.

Montezuma—RESS PHILLIPS, Forest Supervisor, Mancos (WU-G); FRANK TOMPKINS, Deputy Forest Supervisor.

Pike—C. M. GRANGER, Acting Forest Supervisor, Denver (WU, P-Ad, G, P, US, WF); Monument Nursery—W. SCHRADER, Forest Planting Assistant; W. I. HUTCHINSON, Forest Assistant, Monument.

Rio Grande—A. L. STROUP, Forest Supervisor, Monte Vista (WU-G); WALTER F. BOWERS, Deputy Forest Supervisor; JAY HIGGINS, Forest Assistant.

Routt—J. H. RATLIFF, Forest Supervisor, Steamboat Springs (WU-Ad); C. A. SOMMERS, Deputy Forest Supervisor; P. J. PAXTON, Forest Assistant.

San Isabel—J. N. LANGWORTHY, Forest Supervisor, Westcliffe (WU-G); M. B. WILLEY, Deputy Forest Supervisor.

San Juan—ERNEST W. SHAW, Forest Supervisor, Durango (WU-G); A. L. SWEITZER, Deputy Forest Supervisor; PETER KEPLINGER, Forest Assistant.

Sopris—JOHN McLAREN, Acting Forest Supervisor, Aspen (WU-WF, G).

Uncompahgre—HENRY L. SPENCER, Forest Supervisor, Delta (WU-G); HOWARD S. BUSHNELL, Deputy Forest Supervisor; J. H. RAMSKILL, Forest Assistant.

White River—JAMES A. BLAIR, Forest Supervisor, Meeker (WU-WF, G); ELMER E. STEPHENSON, Deputy Forest Supervisor.

KANSAS

Kansas—B. R. H. D'ALLEMAND, Forest Supervisor, Garden City (WU, P-WF).
Garden City Nursery—C. R. TAYLOR, Forest Planting Assistant.

NEBRASKA

Nebraska—W. H. MAST, Forest Supervisor, Halsey (WU-Ad); H. R. SHOCKLEY, Deputy Forest Supervisor; Halsey Nursery—L. BESLEY and C. R. BECHTLE Forest Planting Assistants.

SOUTH DAKOTA

Black Hills—PAUL D. KELLETER, Forest Supervisor, Deadwood (WU-Ad, Am); JOHN MURDOCH, Jr., and G. A. DUTHIE, Forest Assistants.

WYOMING

Bighorn—W. E. JACKSON, Forest Supervisor, Sheridan (WU-Ad); HERBERT GRAFF, Deputy Forest Supervisor.

Bonneville—FOSTER STEELE, Acting Forest Supervisor, Pinedale (WU-P); H. EARLE FRENCH, Deputy Forest Supervisor.

Cheyenne—P. S. LOVEJOY, Forest Supervisor, Laramie (WU, P-P); JOHN W. STEPHENS, Deputy Forest Supervisor; R. A. STRETCH, Forest Assistant.

Hayden—JAMES BLACKHALL, Forest Supervisor, Encampment (WU, P-P); ARTHUR M. COOK, Deputy Forest Supervisor.

Shoshone—H. W. THURSTON, Forest Supervisor, Cody (WU-Ad).

Sundance—LOUIS KNOWLES, Acting Forest Supervisor, Sundance (WU-Ad, Am);

DISTRICT 3

Arizona, Arkansas, Florida, New Mexico, and Oklahoma.

Office, Strickler-Luna Building, Albuquerque, N. Mex.

A. C. RINGLAND, District Forester.

E. H. CLAPP, Assistant District Forester.

H. B. JAMISON, District Law Officer.

BLAKE FRANKLIN, Assistant District Law Officer.

OPERATION

A. O. WAHA, Chief.

A. S. PECK, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, J. J. DUFFY, District Fiscal Agent.

Maintenance, W. B. BUNTON.

SILVICULTURE

T. S. WOOLSEY, Jr., Chief.

A. B. RECKNAGEL, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Arizona—

Check scaling on the Cocónino and Pecos National Forests—A. A. WYNNE, Lumberman, Flagstaff, Ariz., and Santa Fe, N. Mex.

Preparation of working plan report for Coconino National Forest—J. H. ALLISON, Flagstaff.

Special sales examination and reconnaissance, Apache National Forest—ALDO LEOPOLD, in charge; assistants, T. B. LONGWELL, ROBERT MOAK, and C. HELLER, Springerville.

New Mexico—

Preparation of working-plan report for Pecos watershed in the Pecos National Forest—HARRY POOLER, in charge; assistants, T. WELLS, P. P. PITCHLYNN, and G. H. BOHN, Santa Fé.

Revision of working plan for Manzano National Forest and collection of data for volume and growth study of woodland species—L. L. JANES, in charge, F. R. WIGELY, assistant, Albuquerque.

Check scaling on the Datil and Gila National Forests—D. W. ADAMS, Lumberman, Silver City.

Planting, Chief and Assistant Chief of Silviculture.

Inspection of sowing and planting—R. E. ROGERS, Albuquerque, N. Mex.

Silvics, G. A. PEARSON, Coconino Forest Experiment Station, Flagstaff, Ariz.;

H. D. BURRALL, assistant, Coconino Forest Experiment Station, Flagstaff, Ariz.

GRAZING

J. K. CAMPBELL, Chief.

JOHN KERR, Assistant Chief.

NATIONAL FORESTS

ARIZONA

Apache—JOHN D. GUTHRIE, Forest Supervisor, Springerville (WU, P-WF); HARRY C. VILES, Deputy Forest Supervisor; ALDO LEOPOLD, Forest Assistant.

Chiricahua—A. H. ZACHAU, Forest Supervisor, Portal (WU, P-WF).

Coconino—FRANK C. W. POOLER, Forest Supervisor, Flagstaff (WU, P-WF); WIL-LARD M. DRAKE, Deputy Forest Supervisor; J. C. KIRCHER, Forest Assistant.

Coronado—ROBERT J. SELKIRK, Forest Supervisor, Tucson (WU, P-WF).

Crook—T. T. SWIFT, Forest Supervisor, Safford (WU-WF); H. L. JOHNSON, Forest Assistant.

Garces—ROBERT J. SELKIRK, Forest Supervisor, Tucson (WU, P-WF).

Prescott—C. H. HINDERER, Forest Supervisor, Prescott (WU-WF); J. C. MCNELTY Deputy Forest Supervisor.

Sitgreaves—A. J. MACKEY, Forest Supervisor, Snowflake (WU, P-WF).

Tonto—R. G. WILLSON, Forest Supervisor, Roosevelt (WU-WF); CHAS. H. JENNINGS, Deputy Forest Supervisor.

ARKANSAS

Arkansas—S. J. RECORD, Forest Supervisor, Mena (WU-WF); S. A. CHAPPELL, Deputy Forest Supervisor.

Ozark—FRANCIS KIEFER, Forest Supervisor, Harrison (WU-WF); RALPH C. HUEY, Deputy Forest Supervisor.

FLORIDA

Choctawhatchee } —I. F. ELDREDGE, Acting Forest Supervisor, De Funiak Springs;
Ocala } W. F. HILL, Deputy Forest Supervisor.

NEW MEXICO

Alamo—ARTHUR M. NEAL, Forest Supervisor, Alamogordo (WU, P-WF).

Carson—ROSS McMILLAN, Forest Supervisor, Antonito, Colo. (WU-G); FREDERICK R. STARR, Forest Assistant.

Chiricahua—See Arizona.

Datil—W. H. GODDARD, Forest Supervisor, Magdalena (WU, P-WF); R. F. BALTHIS, Deputy Forest Supervisor.

Gila—DOUGLAS RODMAN, Forest Supervisor, Silver City (WU-WF); DON P. JOHNSTON, Deputy Forest Supervisor; Fort Bayard Nursery—H. C. TURNER, Forest Planting Assistant.

Jemez—FRANK E. ANDREWS, Forest Supervisor, Santa Fe (WU, P-WF); B. M. THOMAS, Deputy Forest Supervisor.

Lincoln—J. A. KINNEY, Forest Supervisor, Capitan (WU, P-WF).

Manzano—W. R. MATTOON, Forest Supervisor, Albuquerque (WU, P-WF); JAMES F. MULLEN, Deputy Forest Supervisor.

Pecos—THOS. R. STEWART, Forest Supervisor, Santa Fe (WU, P-WF); HUGH G. CALKINS, Deputy Forest Supervisor; HARRY H. POOLER, Forest Agent; Las Gallinas Nursery—A. HEDRICKS, Forest Planting Assistant.

Zuni—A. D. READ, Forest Supervisor, Gallup (WU, P-WF); E. H. CRABB, Deputy Forest Supervisor.

OKLAHOMA

Wichita—FRANK RUSH, Game Warden, in charge, Cache (WU-WF).

DISTRICT 4

Utah, southern Idaho, western Wyoming, eastern Nevada, and northwestern Arizona.

Office, First National Bank Building, Ogden, Utah.

CLYDE LEAVITT, District Forester.

FRANKLIN W. REED, Assistant District Forester.

W. C. HENDERSON, District Law Officer.

H. P. DECHANT, Assistant District Law Officer.

OPERATION

R. P. IMES, Chief.

E. H. CLARKE, Assistant Chief.

A. T. MITCHELSON, District Engineer.

Organization, Chief and Assistant Chief of Operation.

Accounts, **Q. R. CRAFT**, District Fiscal Agent.

Maintenance, **FELIX T. MOORE**.

SILVICULTURE

L. L. WHITE, Chief.

O. M. BUTLER, Assistant Chief (in the Field).

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Idaho—

Reconnaissance of timber on Sawtooth National Forest—**C. P. WILBER**, Hailey.

Check sealing, Salmon National Forest—**JOHN K. KIDD**, Scaler, Salmon.

Reconnaissance for Minidoka National Forest—**NILS B. ECKBO**, Oakley.

Reconnaissance for Pocatello National Forest—**A. L. BROWER**, Pocatello.

Examination of proposed sales, Payette National Forest—**D. F. SEEREY**, Lumberman; **WILLIAM WINTER**, Forest Assistant, Emmett.

Utah—

Reconnaissance for Manti National Forest—**D. M. LANG**, Ephraim; assistant, **LINCOLN CROWELL**.

Planting, **J. M. FETHEROLF**.

Silvics, **E. R. HODSON**.

PROJECT

Idaho—

Study of the effects of grazing on forest conditions, Caribou National Forest—**E. R. HODSON**, Idaho Falls.

GRAZING

HOMER E. FENN, Chief.

A. C. MCCAIN, Assistant Chief.

G. G. BENTZ, Assistant Chief.

SUPPLY DEPOT

A. M. SMITH, Property Clerk.

PROPERTY AUDIT

J. G. FALCK, Property Auditor.

NATIONAL FORESTS

ARIZONA

Dixie—See Utah.

Kaibab—JOHN H. CLARK, Forest Supervisor, Kanab, Utah (WU-WF); DANIEL K. JUDD, Deputy Forest Supervisor.

IDAHO

Boise—E. GRANDJEAN, Forest Supervisor, Boise (WU-P); D. C. A. GALARNEAU, Forest Assistant.

Cache—See Utah.

Caribou—N. E. SNELL, Forest Supervisor, Idaho Falls (WU-P); L. J. PHELAN, Deputy Forest Supervisor; JAMES H. JOHNSON, Grazing Assistant.

Challis—DAVID LAING, Forest Supervisor, Challis (WU-P); JOHN A. PEARSON, Deputy Forest Supervisor.

Idaho—HENRY A. BERGH, Forest Supervisor, Elo (WU-P).

Lemhi—C. I. HUDDLE, Forest Supervisor, Mackay (WU-P); JAMES L. PELTON, Deputy Forest Supervisor.

Minidoka—WM. MCCOY, Forest Supervisor, Oakley (WU-P); NILS B. ECKBO, Forest Agent.

Payette—GUY B. MAINS, Forest Supervisor, Emmett (WU-P); CARL B. ARENTSON, Deputy Forest Supervisor.

Pocatello—J. F. BRUINS, Acting Forest Supervisor, Pocatello (WU-P); A. L. BROWER, Forest Assistant; Pocatello Nursery—P. T. WRENSTED, Forest Ranger.

Salmon—JAMES M. RYAN, Acting Forest Supervisor, Salmon (WU-P); F. T. McLEAN, Forest Assistant.

Sawtooth—C. N. WOODS, Forest Supervisor, Hailey (WU-P); H. G. McPHETERS, Deputy Forest Supervisor; FRANK J. RYDER and C. P. WILBER, Forest Assistants.

Targhee—DAVID BARNETT, Forest Supervisor, St. Anthony (WU-P); CHESTER B. MORSE, Forest Assistant; LUCAS W. HASTINGS, Grazing Assistant.

Weiser—J. B. LAFFERTY, Forest Supervisor, Weiser (WU-P); W. M. CAMPBELL, Deputy Forest Supervisor; A. E. OMAN, Forest Assistant.

NEVADA

- Humboldt**—C. SYDNEY TREMEWAN, Forest Supervisor, Elko (WU-WF); W. W. BLAKESLEE, Deputy Forest Supervisor.
- Moapa**—HARRY E. MATHEWS, Acting Forest Supervisor, Las Vegas (WU-WF).
- Nevada**—R. F. MATHIAS, Acting Forest Supervisor, Ely (WU-WF); CHAS. F. PATTERSON, Deputy Forest Supervisor; RUDOLPH DIEFFENBACH, Forest Assistant.
- Toiyabe**—M. S. BENEDICT, Forest Supervisor, Austin (WU, P-WF).

UTAH

- Ashley**—W. M. ANDERSON, Forest Supervisor, Vernal (WU-WF).
- Cache**—CLINTON G. SMITH, Forest Supervisor, Logan (WU-P); J. E. ROTHERY, Deputy Forest Supervisor.
- Dixie**—JAMES E. JEWELL, Forest Supervisor, St. George (WU-WF).
- Fillmore**—WM. HURST, Forest Supervisor, Beaver (WU-WF); GEORGE C. THOMPSON, Deputy Forest Supervisor; REESE W. TAYLOR, Forest Assistant.
- Fishlake**—CHARLES L. SMITH, Forest Supervisor, Salina (WU-WF); OLUF G. NIELSON, Deputy Forest Supervisor.
- La Sal**—JOHN RIIS, Forest Supervisor, Moab (WU-WF).
- Manti**—A. W. JENSEN, Forest Supervisor, Ephraim (WU-WF); ERNEST WINKLER, Deputy Forest Supervisor; LINCOLN CROWELL, Forest Assistant; PARLEY CHRISTIANSEN, Grazing Assistant.
- Minidoka**—See Idaho.
- Nebo**—DAN S. PACK, Forest Supervisor, Nephi (WU-WF).
- Pocatello**—See Idaho.
- Powell**—GEO. H. BARNEY, Forest Supervisor, Escalante (WU-WF).
- Sevier**—O. C. SNOW, Forest Supervisor, Panguitch (WU-WF); FRANK W. SEAMAN, Deputy Forest Supervisor.
- Uinta**—W. I. PACK, Forest Supervisor, Provo (WU-WF); H. F. STUDLEY, Deputy Forest Supervisor; SIDNEY S. STEWART, Forest Assistant; W. JONES BOWEN, Grazing Assistant.
- Wasatch**—R. V. R. REYNOLDS, Forest Supervisor, Salt Lake City (WU, P-WF, P); WILLIAM M. MCGHIE, Deputy Forest Supervisor; Wasatch Nursery—N. J. FETHEROLF, Forest Planting Assistant.

WYOMING

- Ashley**—See Utah.
- Caribou**—See Idaho.
- Targhee**—See Idaho.
- Teton**—R. E. MILLER, Forest Supervisor, Jackson (WU-P).
- Wyoming**—JOHN RAPHAEL, Forest Supervisor, Afton (WU-P); H. E. WOOLEY, Deputy Forest Supervisor; JOHN E. INGRAM, Forest Assistant; GLIDDEN J. BARSTOW, Grazing Assistant.

DISTRICT 5

California and southwestern Nevada.

Office, First National Bank Building, San Francisco, Cal.

F. E. OLMSTED, District Forester.

COERT DUBOIS, Assistant District Forester.

E. A. LANE, District Law Officer.

PAUL MITCHELL, Assistant District Law Officer.

OPERATION

ROY HEADLEY, Chief.

R. F. HAMMATT, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, **CLARENCE WILEY**, District Fiscal Agent.

Maintenance, **JAMES B. JEFFRIES**.

SILVICULTURE

G. M. HOMANS, Chief.

T. D. WOODBURY, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Supervision of operations on the Standard Lumber Company's timber sale, Stanislaus National Forest—**J. C. ELLIOTT**, Lumberman, Sonora, Cal.

Examination of timber trespass and of proposed sale areas in the recent addition to the Lassen National Forest—**C. H. ENSIGN**, Lumberman, Red Bluff, Cal.

Examination of proposed sale areas on the Plumas National Forest—**PATRICK KENNADY**, Lumberman, Quincy, Cal.

Marking timber and examination of sales, Mono and Inyo National Forests—**SWIFT BERRY**, Bishop, Cal.

Planting, **G. W. PEAVY**; **C. A. KUPFER**, Assistant.

PROJECTS

Construction of a coniferous nursery, location of permanent experimental planting areas, and the collection of seed on the Shasta National Forest—**N. O. TORSTENSON**, Planting Assistant, California.

Preparation of a plan for experimental eucalypts planting in southern California—**J. M. GRANT**, Santa Barbara, Cal.

Silvics, Chief and Assistant Chief of Silviculture.

GRAZING

JOHN H. HATTON, Chief.

M. B. ELLIOTT, Assistant Chief.

PRODUCTS

C. S. SMITH, in Charge.

PROJECTS

Timber Tests—

Testing laboratory in cooperation with the University of California, Berkeley, Cal.—A. L. HEIM, in charge; assistants, G. R. GESSERT and A. K. ARMSTRONG:

Tests on red wood in cooperation with the California Redwood Association.

Wood Preservation—

Experiments to determine the best methods of seasoning *Eucalyptus globulus* poles and logs, in cooperation with the estate of Adolph Sutro, the Pacific Land Investment Company, the Mount Tamalpais Cemetery Association, and the Parkside Realty Company; and *Eucalyptus viminalis* logs, in cooperation with the University of California—C. STOWELL SMITH, San Francisco, Cal.

Experiments to determine the relative resistance to marine wood borers of different species of untreated timber and of Douglas fir treated by various preservatives and coatings—C. STOWELL SMITH, San Francisco, Cal.

NATIONAL FORESTS

CALIFORNIA

Angeles—R. H. CHARLTON, Forest Supervisor, Los Angeles (WU, P-WF); ERNEST B. LONG, Deputy Forest Supervisor; Lytle Creek Nursery—SEROPE Y. PARNAY, Forest Planting Assistant, San Bernardino.

California—ERNEST BRITTEN, Forest Supervisor, Willows (P-WF); N. B. DREW, Deputy Forest Supervisor.

Cleveland—H. A. E. MARSHALL, Forest Supervisor, San Diego (WU, P-WF); PERCY L. DAY, Deputy Forest Supervisor; F. L. RICKEY, Planting Assistant.

Inyo—A. H. HOGUE, Forest Supervisor, Bishop (WU-WF); JOHN D. COFFMAN, Forest Assistant.

Klamath—R. L. FROMME, Forest Supervisor, Yreka (P-WF); FRANK W. HARLEY, Deputy Forest Supervisor; SHIRLEY W. ALLEN, Forest Assistant.

Lassen—L. A. H. KLING, Forest Supervisor, Red Bluff (P-WF); J. C. LA PLANT, Deputy Forest Supervisor; HENRY L. BOLDENWECK, Forest Agent.

Modoc—C. E. RACHFORD, Forest Supervisor, Alturas (P-WF); VERNON L. BONNER, Deputy Forest Supervisor; BELKNAP C. GOLDSMITH, Forest Assistant.

Mono—See Nevada.

Monterey—RAYMOND TYLER, Forest Supervisor, Salinas (WU-WF).

- Plumas**—L. A. BARRETT, Forest Supervisor, Quincy (WU-WF); W. G. DURBIN, Deputy Forest Supervisor; J. R. HALL, Forest Assistant.
- Santa Barbara**—WILLIS M. SLOSSON, Forest Supervisor, Santa Barbara (P-WF); H. G. MERRILL, Deputy Forest Supervisor.
- Sequoia**—E. A. SHERMAN, Forest Supervisor, Hot Springs, Tulare County (WU via Portersville-WF); W. C. BURTON, Deputy Forest Supervisor.
- Shasta**—W. B. RIDER, Forest Supervisor, Sisson (P-WF); PHILIP T. HARRIS, Deputy Forest Supervisor; ALLEN H. HODGSON, Forest Assistant.
- Sierra**—C. H. SHINN, Forest Supervisor, Northfork (WU via Fresno-WF); H. J. TOMPKINS, Forest Assistant.
- Stanislaus**—R. W. AYERS, Forest Supervisor, Sonora (WU-WF); D. N. ROGERS, Deputy Forest Supervisor; J. V. WOLFF, Forest Assistant.
- Tahoe**—R. L. P. BIGELOW, Forest Supervisor, Nevada City (WU-WF); M. B. PRATT, Deputy Forest Supervisor; J. ALFRED MITCHEL, Forest Assistant.
- Trinity**—F. H. HAFLEY, Forest Supervisor, Weaverville (WU-WF); W. A. HUESTIS, Deputy Forest Supervisor; ERNEST V. JOTTER, Forest Assistant.

NEVADA

Inyo—See California.

Mono—WM. M. MAULE, Forest Supervisor, Gardnerville (WU-WF).

Tahoe—See California.

DISTRICT 6

Washington, Oregon, and Alaska.

Office, Beck Building, Portland, Oreg.

E. T. ALLEN, District Forester.

GEO. H. CECIL, Assistant District Forester.

C. R. PIERCE, District Law Officer.

W. F. STALEY, Assistant District Law Officer.

OPERATION

C. H. FLORY, Chief.

C. J. BUCK, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, A. H. COUSINS, District Fiscal Agent.

Maintenance, SHIRLEY BUCK.

SILVICULTURE

F. E. AMES, Chief.

C. S. JUDD, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Oregon—

Examination of proposed sale areas on the Crater National Forest—W. T. ANDREWS, Lumberman, Medford.

Examination of proposed sale areas on the Siskiyou National Forest—J. P. HUGHES, Lumberman, Grants Pass.

Scaling on the Crater National Forest—D. L. MCKAY, Jr., Scaler, Medford.

Washington—

Scaling on important sales, Columbia National Forest—EDWIN C. ERICKSON, Scaler, Carson.

Reconnaissance of the Olympic National Forest—MAX ROTHKUGEL, Forest Assistant, Olympia.

Planting, J. F. KÜMMEL.

Silvics, T. T. MUNGER.

GRAZING

HOWARD K. O'BRIEN, Chief.

T. P. MACKENZIE, Assistant Chief.

PRODUCTS

J. B. KNAPP, in Charge.

PROJECTS

Timber Tests—

Testing laboratory in cooperation with the University of Washington, Seattle, Wash.—O. P. M. Goss in charge; assistants, P. S. BUHL, C. W. ZIMMERMAN.

Tests of treated Douglas fir in cooperation with the Pacific Creosoting Company.

Tests of air-dried Douglas fir in cooperation with the Oregon and Washington Lumber Manufacturers' Association.

Tests of fire-killed Douglas fir in cooperation with the Clarke County Timber Company and the Eastern and Western Lumber Company.

Wood Preservation—

Investigation of the possibilities for the preservative treatment of posts and poles used for improvement work on the National Forests in District 6—H. B. OAKLEAF, Portland, Oreg.

Supervision of the treatment of test timbers in cooperation with the Pacific Creosoting Company—H. B. OAKLEAF, Portland, Oreg.

Wood Utilization—

Study of wood-using industries and markets for forest products—J. B. KNAPP, Portland, Oreg.

Study of the waste due to the manufacture of even lengths only in planing-mill products—J. B. KNAPP and H. B. OAKLEAF, Portland, Oreg.

NATIONAL FORESTS**ALASKA**

Chugach—W. A. LANGILLE, Forest Supervisor, Ketchikan (SC, U. S. A., WU-AP); HOWARD M. CONRAD, Deputy Forest Supervisor; LAGE WERNSTEDT, Forest Assistant.

Tongass—W. A. LANGILLE, Forest Supervisor, Ketchikan (SC, U. S. A., WU-AP); HOWARD M. CONRAD, Deputy Forest Supervisor; LAGE WERNSTEDT, Forest Assistant.

CALIFORNIA

Crater—See Oregon.

Siskiyou—See Oregon.

OREGON

Cascade—C. R. SEITZ, Forest Supervisor, Eugene (WU, P-WF); J. R. HARVEY, Deputy Forest Supervisor; E. B. STARR, Forest Assistant.

Crater—M. L. ERICKSON, Forest Supervisor, Medford (WU, P-WF); S. S. SWENNING, Deputy Forest Supervisor; H. D. FOSTER and B. T. HARVEY, Forest Assistants.

Deschutes—A. S. IRELAND, Forest Supervisor, Prineville (PT & T-WF, via Shaniko).

Fremont—GUY M. INGRAM, Forest Supervisor, Lakeview (WU via Klamath Falls-WF); G. D. BROWN, Deputy Forest Supervisor.

Malheur—CY. J. BINGHAM, Forest Supervisor, John Day (WU via Baker City-WF via Baker City).

Oregon—T. H. SHERRARD, Forest Supervisor, Portland (WU, P-WF, N, P); RALPH S. SHELLEY, Deputy Forest Supervisor; W. B. OSBORNE, Forest Assistant.

Siskiyou—M. J. ANDERSON, Forest Supervisor, Grants Pass (WU, P-WF); HUGH M. GUTHRIE, Deputy Forest Supervisor; H. HAEFNER, Forest Assistant.

Siuslaw—A. E. COHOON, Forest Supervisor, Eugene (WU, P-WF); DAVID E. FITTON, Deputy Forest Supervisor.

Umatilla—THOS. E. CHIDSEY, Forest Supervisor, Heppner (WU-P).

Umpqua—S. C. BARTRUM, Forest Supervisor, Roseburg (WU, P-WF); H. M. HALE, Deputy Forest Supervisor; E. H. McDANIELS, Forest Assistant.

Wallowa—HARVEY W. HARRIS, Acting Forest Supervisor, Wallowa (WU-P); SHERMAN A. BROWN, Deputy Forest Supervisor; CHAS. BLACK, Grazing Assistant.

Wenaha—See Washington.

Whitman—HENRY IRELAND, Forest Supervisor, Sumpter (WU via Baker City-WF via Baker City).

WASHINGTON

- Chelan**—GEORGE W. MILHAM, Forest Supervisor, Chelan (PT & T-GN via Wenatchee); D. S. RICE, Deputy Forest Supervisor; D. B. REYNOLDS, Forest Assistant.
- Columbia**—HOMER ROSS, Acting Forest Supervisor, Portland, Oreg. (WU, P-WF, N, P); ARTHUR R. WILCOX, Forest Assistant.
- Colville**—C. C. REID, Acting Forest Supervisor, Republic (WU, P-GN).
- Olympic**—R. E. BENEDICT, Forest Supervisor, Olympia (WU-GN, N); E. E. FISHEL, Deputy Forest Supervisor; MAX ROTHKUGEL, Forest Assistant.
- Rainier**—G. F. ALLEN, Forest Supervisor, Orting (WU-N); H. L. HURD, Deputy Forest Supervisor; C. P. WILLIS and E. J. FENBY, Forest Assistants.
- Snoqualmie**—B. P. KIRKLAND, Forest Supervisor, Seattle (WU, P-N, GN, WF); E. T. CLARK, Forest Assistant.
- Washington**—C. H. PARK, Forest Supervisor, Bellingham (WU, P-GN, N); A. A. PARKER, Deputy Forest Supervisor; F. H. BRUNDAGE and M. L. MERRITT, Forest Assistants.
- Wenaha**—J. M. SCHMITZ, Forest Supervisor, Walla Walla (WU-N, P).
- Wenatchee**—A. H. SYLVESTER, Forest Supervisor, Leavenworth (WU-GN); S. A. BLANKENSHIP, Deputy Forest Supervisor; FRED W. CLEATOR, Forest Assistant.

SERVICE CHANGES IN OCTOBER

APPOINTED

Products—

WOOD UTILIZATION: CHARLES F. HATCH, Expert.

District 5—

OPERATION: JAMES B. JEFFRIES, Chief of Maintenance.

RESTORED TO THE ROLLS

Silviculture—

SILVICS: NORMAN H. GRUBB, Expert.

REINSTATED

District 2—

OPERATION: NILE HUGHEL.

CHANGE IN DESIGNATION

District 2—

ORGANIZATION: M. B. WILLEY, Deputy Forest Ranger, Rio Grande National Forest, to Deputy Forest Supervisor, San Isabel National Forest.

OPERATION: NILE HUGHEL, to District Engineer.

District 3—

ORGANIZATION: HARRY C. VILES, Deputy Forest Ranger, Pecos National Forest, to Deputy Forest Supervisor, Apache National Forest; CHARLES H. JENNINGS, Forest Ranger to Deputy Forest Supervisor, Tonto National Forest; FRANCIS

KIEFER, Forest Assistant, Arkansas National Forest, to Forest Supervisor, Ozark National Forest; RALPH C. HUEY, Assistant Forest Ranger, Ozark National Forest, to Deputy Forest Supervisor, Ozark National Forest; DON P. JOHNSTON, Deputy Forest Ranger (Land Examiner), to Deputy Forest Supervisor, Gila National Forest; FRANK E. ANDREWS, Deputy Forest Supervisor, Gila National Forest, to Forest Supervisor, Jemez National Forest; B. M. THOMAS, Deputy Forest Ranger, Jemez National Forest, to Deputy Forest Supervisor, Jemez National Forest; I. F. ELDREDGE, Forest Examiner, to Acting Forest Supervisor, Choctawhatchee and Ocala National Forests.

District 5—

ORGANIZATION: WM. M. MAULE, Forest Assistant, to Forest Supervisor, Mono National Forest; J. C. WELLS, Forest Supervisor, Mono National Forest, to Grazing Assistant.

District 6—

ORGANIZATION: FRED HANSON, Forest Supervisor, to Forest Ranger.

TRANSFERRED

District 2—

ORGANIZATION: JAY HIGGINS, Forest Assistant, Sopris National Forest, to Rio Grande National Forest.

District 3—

ORGANIZATION: W. F. HILL, Deputy Forest Supervisor, Ozark National Forest, to Deputy Forest Supervisor, Choctawhatchee and Ocala National Forests; HUGH G. CALKINS, Deputy Forest Supervisor, Gila National Forest, to Deputy Forest Supervisor, Pecos National Forest.

FURLOUGHED

District 2—

ORGANIZATION: DAVID ANDERSON, Forest Supervisor, Battlement National Forest.

District 5—

ORGANIZATION: WM. G. HOWARD, Forest Assistant, Sierra National Forest.

APPOINTMENT TERMINATED

Silviculture—

STATE AND PRIVATE COOPERATION: FRANK VOGEL, Forest Expert.

SEPARATED

District 1—

ORGANIZATION: ROBERT SIMMONS, Forest Assistant, Beaverhead National Forest.

SERVICE NOTES FOR NOVEMBER

These notes contain instructions and necessary information for Forest officers, and will, therefore, be carefully read and kept on file for reference.

OFFICE OF THE FORESTER

LAW

Advice—

On September 15 the Secretary of the Interior received from the office of the Attorney-General an opinion, the substance of which is as follows: Where certain unsurveyed public lands are withdrawn on the application of the governor under the act of August 28, 1904, with a view to selecting specific tracts thereof as indemnity lands as soon as the survey is made, the inclusion of the lands in a National Forest before survey defeats the State's preferential right of selection, which would otherwise have been secured by the governor's application.

On September 30, in a letter to Attorney-General Galen, of Montana, the Department of the Interior rendered an opinion, the substance of which is as follows: The grant of sections 16 and 36 to the State of Montana for public-school purposes, while a grant *in præsenti*, does not attach to any particular tract of land until such land is surveyed and, if, prior to such survey—that is, prior to the date when such survey is officially approved—Congress or a government officer acting under authority of Congress makes other disposal of that particular tract by including it in a Forest Reserve, the title of the State thereto does not attach until the reservation is extinguished and the land is restored to the public domain.

Indictment for Grazing without Permit—

On October 8 the Federal Grand Jury for the Eastern District of Washington returned an indictment against U. F. Diteman and Robert Rennie for grazing sheep upon the Rainier National Forest without a permit.

OPERATION

Accounts Payable from More than One Appropriation—

Where a Form 4 or Form A voucher is payable from more than one appropriation, the appropriation involved should be indicated for each item in the account. The initials only of the appropriation need be used, as "GE" for "General Expenses," "I" for "Improvement," "C" for "Cooperative," etc. The initial letters should be placed on the margin on a line with the amount. It will not be necessary to indicate each item, but it will be sufficient to have the notation made only when the

appropriation changes; for instance, if the first item on the account is designated "GE" and several items following are also payable from "General Expenses," the letters may be omitted until an item on the account payable from another appropriation is reached, when the proper letters should be inserted.

Stamping Vouchers—

Supervisors are requested to exercise care in stamping vouchers with the "Date received" stamp. Vouchers are frequently received stamped in such a manner as to obliterate statements in regard to the account and the Auditor for the State and Other Departments has objected to such practice.

Location of Trail Grades—

Under this heading the September Field Program stated that 15 per cent is an ideal grade for trails in mountain country. Some Forest officers consider this grade excessive, except for short distances, and feel that 10 per cent should be considered the ideal grade. Obviously if a grade of 10 per cent can be obtained at a reasonable cost this should be done. The question of whether a 10 or a 15 per cent grade will be used in any given case will have to be left to the judgment of the Forest officer building the trail.

Outside Employment—

When a member of the Service wishes to do outside work written application for permission to do such work should be made to the Secretary of Agriculture by the person immediately concerned. When the member is connected with a District office, the application should be initialed in the lower left-hand corner by the District Forester, and when employed upon a National Forest, by both the supervisor and the District Forester. It should be forwarded by the District Forester to the Forester for his recommendation to the Secretary. The applicant should in every case state the kind of work contemplated and that it will not hamper or interfere with his work for the Department.

Disposal of Discarded Service Badges—

A request that he be allowed to purchase for private ownership a Service badge has been received from a Forest officer. For the reason that the Service badge carries with it certain authority, which should only be exercised by members of the Service under appointment from the Secretary, it is felt that under no circumstances should broken or worn-out badges be retained as personal property by members of the Service. Whenever badges are broken and new ones required the broken badge should be returned to the Property Clerk, by whom it will be either repaired or destroyed. Every precaution should be taken to see that badges are not secured by those not authorized to wear them.

To Make Strong Boxes Mice-Proof—

It is suggested to supervisors that, in place of using tin or zinc for the lining of strong boxes at ranger stations, they use a half-inch-mesh galvanized wire and that this be stapled or tacked on the outside of the box. Experience has proven that this prevents mice from getting into the boxes and answers every purpose that other covering does and is much lighter to pack. The first cost is much less than that of any other covering.

National Forest Names—Origin, Definition, and Derivation—

A mimeographed circular giving the names of the National Forests, with their origin, definition, or derivation, has been sent to Forest officers. It contains data which has been collected from time to time during the past three years. The Forester will be glad to receive additions or corrections.

SILVICULTURE**Silvics: Library—**

As a record of all the books and periodicals purchased by members of the Forest Service is kept in the Service library, the librarian should be notified at once whenever such purchases are to be made. When a large number of books is to be purchased at one time, from funds other than those set aside for books for field libraries, the amount necessary for their purchase should be transferred to the field library fund, and the books ordered through the Service library. No books will be paid for from this fund unless ordered through the library, with the approval of the library committee.

GRAZING**Crossing Permits, Regulation 66—**

Crossing permits should not be issued in cases where it is clearly apparent that the stock, by reason of its weak physical condition, can not be driven across the Forest without great delay and trespass upon ranges allotted to permittees.

While the crossing of livestock over National Forests should be facilitated to the fullest extent compatible with the proper protection of the Forests, crossing privileges should not be granted in cases where hardship or irreparable damage to permittees will result, or where it is evident that a trespass will follow. A violation of the terms of a crossing permit is a trespass and should be reported as such.

Although the refusal of a crossing permit may be warranted by the circumstances, the Forest officer handling the case should take every reasonable precaution to prevent suffering or loss of stock and should not expose the Service to criticism by arbitrary or ill-advised action.

PRODUCTS**Transfer of Products Work—**

On October 15 the organization of the Forest Products Laboratory was established at Madison, Wis., and the Office of Wood Utilization in the Fisher Building, Chicago, Ill. The laboratory will be a fire-proof building to cost, approximately, \$50,000, and is located near the Chicago, Milwaukee and St. Paul Railroad, with exclusive tracks and other railroad facilities. The building is expected to be ready for occupancy on January 1. In the meanwhile temporary offices will be located at 1610 Adams street, Madison.

On October 1 the Yale Timber Testing Laboratory was discontinued and the Forest Service equipment there shipped to Madison. The laboratory at Washington was discontinued at the same time. The timber testing laboratory at Purdue,

University, Lafayette, Ind., will be operated until the middle of December, when it will be discontinued and its equipment shipped to Madison.

The offices having general supervision over all the work of the Branch of Products will remain temporarily at Washington. The work of the Laboratory will be assigned to five offices, as follows:

WOOD PRESERVATION, which will study all problems related to the impregnation of wood with preservatives and other substances.

WOOD CHEMISTRY, which will handle all work bearing on the chemical utilization of forest products. Wood distillation, paper pulp and other fiber products, chemical analyses of creosotes, turpentine, etc., are the principal lines handled by this office.

TIMBER TESTS, which will have charge of all tests to determine the strength and other mechanical properties of different woods.

TECHNOLOGY, which will study the microscopic structure of wood, methods of seasoning and drying it, and other problems of a purely technical character.

MAINTENANCE, which will have charge of the filing and computing, the purchase of supplies, and general care of the entire Laboratory.

The work in the Laboratory will be of three kinds, as follows: (1) The investigation of problems in experimental research; (2) experimental work in cooperation with commercial plants to verify laboratory experiments on a commercial scale; (3) cooperation with outside parties for the purpose of assisting them in applying principles and processes of recognized commercial value with which the Service is thoroughly familiar.

The work of the Office of Wood Utilization, at Chicago, will consist of studies of the wood-using industries of various States, the study of woods in manufacture and of the methods of disposing of mill waste, the collection of statistics on the price of lumber at the mill and at the principal distributing markets of the country, and the study of specifications and grading rules. The Office will also secure statistics of forest products of importance to the experimental work of the Service and the study of the movements of lumber and of the conditions of the principal lumber markets.

All letters regarding Products work will continue to be addressed to the Forester at Washington. Reply will be made from Washington, if matters of policy are involved. If matters of policy are not involved, reply will be made by the Director of the Laboratory, if the subject refers to experimental work; and by the Chief of the Office of Wood Utilization, if the subject refers to Utilization work.

SERVICE PUBLICATIONS ISSUED IN OCTOBER

Circular 160. Coyote-Proof Experiment, 1908.

Circular 169. Natural Revegetation of Depleted Mountain Grazing Lands.

Unnumbered Circular. The National Forests of Arkansas.

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- Explanations unnecessary on vouchers; July (26).
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- Fire trespass, legal proceedings in; August (59).
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 Saloon trespass, proceedings in; August (60).
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 Survey of pastures, rule for; July (28).
 Timber sales, supervisors advertised, delegation of authority in; August (61).
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 Uinta National Forest, change in administration; August (60).
 Use Book, error in paragraph on second entries; July (26).
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 Vouchers, unnecessary explanations on; July (26).
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 Water powers, to be considered in reports on railroad rights of way; September (91).
 Weiser National Forest, change in administration; August (60).

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

GIFFORD PINCHOT, Forester

December Field Program 1909

This program of field work and assignments in the Forest Service is issued on the first day of each month and is for the exclusive use of members of the Service and cooperating bureaus. The names of members whose assignments are not yet fixed and reference to projects for which plans have not been matured are necessarily omitted. All orders and other instructions printed in the Field Program will apply to all Districts.

It is requested that the members of the Forest Service cooperate in making this program complete and accurate.

Unless the address of a member is given in this program or is definitely known, he should be addressed in care of the Forest Service, Washington, D. C.

FIELD PROGRAM FOR DECEMBER, 1909

OFFICE OF THE FORESTER

GIFFORD PINCHOT, Forester.

OVERTON W. PRICE, Associate Forester.

HARRY L. HILL, Secretary to the Forester.

P. P. WELLS, Law Officer.

A. C. SHAW, Assistant Law Officer.

HERBERT A. SMITH, Editor.

FINDLEY BURNS, in charge of Publication.

RAYMOND W. PULLMAN, in charge of Information.

GEORGE B. SUDWORTH, Dendrologist.

R. S. KELLOGG, Assistant Forester, engaged upon Forest Statistics.

EUGENE S. BRUCE, Expert Lumberman.

D. D. BRONSON, General Inspector.

E. M. GRIFFITH, Special Inspector, Madison, Wis.

OPERATION

JAMES B. ADAMS, Assistant Forester, in Charge.

GEORGE G. ANDERSON, Assistant in Office Methods.

ACCOUNTS

H. B. CRAMER, Fiscal Agent.

E. A. MELZAR, District Fiscal Agent.

GEOGRAPHY

FRED G. PLUMMER, Chief.

Atlas, G. B. BRUCE, Acting.

Drafting, C. A. KOLB.

Alienation, J. B. SATTERLEE.

Photography, A. G. VARELA.

MAINTENANCE

GEORGE A. BENTLEY, Chief.

SILVICULTURE

WILLIAM T. COX, Assistant Forester, in Charge.
E. E. CARTER, Assistant Forester.

STATE AND PRIVATE COOPERATION

J. G. PETERS, Chief (in the Field).
J. H. FOSTER, Acting Chief.

PROJECTS

Alabama—

Preparation of a working-plan report for the Tennessee Coal, Iron and Railroad Company—E. D. CLARK, Washington, D. C.

Kentucky—

Preparation of a report on forest conditions, in cooperation with State Board of Agriculture, Forestry, and Immigration—R. C. HALL, W. H. VON BAYER, J. M. BRISCOE, and O. D. INGALL, Washington, D. C.

Mississippi—

Preparation of a report on forest conditions, in cooperation with the State—C. E. DUNSTON, Washington, D. C.

North Carolina—

Preparation of a report on forest conditions, in cooperation with North Carolina Geological and Economic Survey—J. S. HOLMES, W. B. WILLEY, and A. W. WILLIAMSON, Chapel Hill.

South Carolina—

Preparation of a report on preliminary examination of forest conditions, in cooperation with the State—W. M. MOORE, Washington, D. C.

Virginia—

Preliminary examination of forest conditions, in cooperation with the State, and examination of forest land, in cooperation with private owners—W. W. ASHE, Richmond.

SILVICS

RAPHAEL ZON, Chief.

PROJECTS

General—

Basket willow study and seed testing and seed storage—N. H. GRUBB, Washington, D. C.

Northeastern States—

Study of northern hardwoods—E. H. FROTHINGHAM, Washington, D. C.

Remeasurement of permanent sample plots—C. R. TILLOTSON, Washington, D. C.

Forest Measurements, W. B. BARROWS.

Compilation, Miss M. C. GANNETT.

Library, Miss H. E. STOCKBRIDGE.

GRAZING

A. F. POTTER, Assistant Forester, in Charge.

L. F. KNEIPP, Assistant Forester.

WILL C. BARNES, Inspector of Grazing (in the Field).

PROJECTS

Forage investigations; compilation of data—F. V. COVILLE, Botanist, Bureau of Plant Industry, in charge, Washington, D. C.; preparation of report on experimental pasture project, JAMES T. JARDINE, Deputy Forest Supervisor, Washington, D. C.; preparation of report on forage plant investigations, ARTHUR T. SAMPSON, Plant Ecologist, Washington, D. C. (detailed to Bureau of Plant Industry under instructions of F. V. COVILLE, Botanist).

Identification of grasses and plants—Dr. EDWARD L. GREENE, Consulting Expert, Washington, D. C.

PRODUCTS

WM. L. HALL, Assistant Forester, in Charge.

LABORATORY

In cooperation with the University of Wisconsin.

MCGARVEY CLINE, Director, Madison, Wis.

WOOD PRESERVATION

HOWARD F. WEISS, in Charge, Madison, Wis.

Projects

Construction and experimental operation of a wood-preserving plant, in cooperation with the Alabama Wood Preserving Company—EDWARD H. FORD, Birmingham, Ala.

Installation and operation of an experimental tie-treating plant, in cooperation with the Tennessee Coal, Iron and Railroad Company—EDWARD H. FORD, Birmingham, Ala.; assistant, F. M. BOND.

Design and construction of apparatus for the prevention of sap stain and for a wood-preserving plant, in cooperation with the Great Southern Lumber Company—C. T. BARNUM, Madison, Wis.

Investigations of coal, petroleum, and wood-tar creosotes and their derivatives as possible wood preservatives—C. P. WINSLOW, Madison, Wis.

Investigations of wood substitutes—E. W. PETERS, Madison, Wis.

Preparation of treating-plant reports—C. H. TEESDALE, Madison, Wis.

TIMBER TESTS

ROLF THELEN, in Charge, Madison, Wis.

Projects

Timber-testing laboratory, ROLF THELEN, in charge, Madison, Wis.:

Purchase and installation of machinery and equipment;

Design of wood-working shop and purchase of equipment;

Design of machine shop and purchase of equipment.

Correlation of file system and analysis of timber-test data—H. E. MCKENZIE and J. O. BIXBY.

Timber-testing laboratory, Lafayette, Ind., in cooperation with Purdue University—W. K. HATT in charge; assistants, J. A. NEWLIN, THOMAS LYONS, and HARRY WEYLS:

Study of the effect of creosoting on the strength of southern pine, in cooperation with the Illinois Central Railway;

Study of the physical and mechanical properties of several species of hickory, in cooperation with the National Hickory Association;

Study of the physical and mechanical properties of red oak cross-ties treated by various preservative processes, in cooperation with the American Railway Engineering and Maintenance of Way Association.

WOOD CHEMISTRY

H. S. BRISTOL, in Charge, Madison, Wis.

H. E. SURFACE, Assistant, Madison, Wis.

Projects

Experiments with various woods for paper pulp—E. SUTERMEISTER, at Madison, Wis.

The refining and grading of wood turpentine and the methods of turpentine analysis—L. F. HAWLEY and E. BATEMAN, both at Madison, Wis.

WOOD TECHNOLOGY

H. D. TIEMANN, in Charge, Washington, D. C.

Projects

Devisal of methods and design of apparatus for drying and humidifying wood—H. D. TIEMANN.

Micrological studies of American woods—C. D. MELL and W. D. BRUSH.

Making micro-photographs of wood sections—H. D. TIEMANN and C. D. MELL.

Determination of the effect of different processes of drying upon the properties of wood—H. D. TIEMANN.

MAINTENANCE

W. H. KEMPFER, in Charge, Madison, Wis.

Stenography, Mrs. NINA OWEN.

Computing, Mrs. CARRIE N. MILLER.

Files and Library, Miss ELLA O. LATHAM.

WOOD UTILIZATION

H. S. SACKETT, in Charge, Fisher Building, Chicago, Ill.

PROJECTS

Markets—

Preparation of a market report for Chicago, Ill.—FRANKLIN H. SMITH, Fisher Building, Chicago, Ill.

Prices—

Collection of wholesale lumber prices in the markets and f. o. b. mill prices—FRANKLIN H. SMITH, Fisher Building, Chicago, Ill.

Wood Uses—

Study of the wood-using industries of Illinois—FRANKLIN H. SMITH, Fisher Building, Chicago, Ill.

Study of the wood-using industries of Wisconsin, in cooperation with the State Board of Forestry—FRANKLIN H. SMITH, Fisher Building, Chicago, Ill.

Study of the wood-using industries of Kentucky, in cooperation with the State Board of Agriculture, Forestry, and Immigration—R. E. SIMMONS, Fisher Building, Chicago, Ill.

Study of the wood-using industries of North Carolina, in cooperation with the North Carolina Geological and Economic Survey—R. E. SIMMONS, Fisher Building, Chicago, Ill.

Study of the wood-using industries of Maryland, in cooperation with the State Board of Forestry—HU MAXWELL, Washington, D. C.

Study of the wood-using industries of Massachusetts, in cooperation with F. W. RANE, State Forester, State House, Boston, Mass.—HU MAXWELL, Washington, D. C.

Preparation of reports upon the uses of the principal commercial woods—HU MAXWELL, Washington, D. C.; W. L. HALL, Washington, D. C.

Study of woods which may be used as substitutes for the southern junipers in the manufacture of lead pencils—H. S. SACKETT, Fisher Building, Chicago, Ill.

Waste—

Study of the waste incident to the manufacture of even lengths of flooring, ceiling, siding, and finish in the white pine, yellow pine, and hardwood regions—CHAS. F. HATCH, Fisher Building, Chicago, Ill.

DISTRICTS

DISTRICT 1

Montana, northeastern Washington, northern Idaho, northwestern South Dakota, northern Michigan, northern Minnesota, and southwestern North Dakota.

Office, Hammond Block, Missoula, Mont.

W. B. GREELEY, District Forester.

F. A. SILCOX, Assistant District Forester.

W. M. AIKEN, District Law Officer.

E. B. QUIGGLE, Assistant District Law Officer.

OPERATION

R. H. RUTLEDGE, Chief.

R. Y. STUART, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, **H. I. LOVING**, District Fiscal Agent.

Maintenance, **R. L. CAMPBELL**.

SILVICULTURE

A. W. COOPER, Chief.

D. T. MASON, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Montana—

Northern Pacific estimates—**KARL W. WOODWARD**, **N. C. BROWN**, **L. S. MURPHY**, **W. B. PIPER**, **J. ST. J. BENEDICT**, and **E. D. FLETCHER**, Missoula; Kootenai National Forest, **F. A. GAYLORD**, Libby; Bitterroot National Forest, **M. N. STICKNEY**, Darby.

Examination of timber, Sioux National Forest—**J. S. BAIRD**, Lumberman, Camp Crook, S. Dak.; assistants, **A. A. SAUNDERS**, **J. W. BUTLER**, **J. L. COBBS**, **H. E. FEGLEY**, **R. P. PRITCHARD**, **M. C. CASE**, **V. STARZINGER**, **C. D. KIGER**, **L. C. STOCKDALE**, and **R. W. MCKNIGHT**.

Estimate of timber, proposed Milwaukee right of way, Blackfeet National Forest—**J. A. FITZWATER**, Kalispell.

Check scaling, Kootenai National Forest—**G. L. COTT**, Lumberman, Libby.

PROJECTS

Montana—

Supervision of fall sowing and planting experiments—E. C. CLIFFORD, Missoula.

Supervision of experimental sowing, Sioux National Forest—G. B. McDONALD, Camp Crook, S. Dak.

Silvics, Chief and Assistant Chief of Silviculture.

PROJECTS

Idaho—

Preparation of yield tables, Coeur d'Alene National Forest—F. I. ROCKWELL, Missoula, Mont.

Montana—

Preparation of yield tables, Kootenai National Forest—E. I. TERRY, Missoula.

Cooperation, Bureau of Entomology.

PROJECT

Location of insect-infested timber and determination of methods of local control—JOSEF BRUNNER, Field Agent, Bureau of Entomology, Columbia Falls, Mont.

GRAZING

C. H. ADAMS, Chief.

W. S. PERRINE, Assistant Chief.

PRODUCTS

PROJECTS

Wood Preservation—

Construction and experimental operation of a wood-preserving plant for treating fence posts and other ranch timbers, in cooperation with the Bitter Root Stock Farm—P. R. HICKS, Missoula, Mont.

Construction and experimental operation of a wood-preserving plant for treating ties, mine timbers, and telephone poles, in cooperation with the Anaconda Copper Mining Company—P. R. HICKS, Missoula, Mont.

NATIONAL FORESTS

IDAHO

Beaverhead—See Montana.

Clearwater—F. A. FENN, Forest Supervisor, Kooskia (WU-N); EDW. C. THIENON, Deputy Forest Supervisor.

Coeur d'Alene—W. G. WEIGLE, Forest Supervisor, Wallace (WU-N); E. R. BRUNKE, Deputy Forest Supervisor; F. I. ROCKWELL, Forest Assistant.

Kaniksu—See Washington.

Nezperce—GEO. V. RING, Forest Supervisor, Grangeville (WU-N); J. ARTHUR BROWN, Deputy Forest Supervisor.

Pend Oreille—J. E. BARTON, Forest Supervisor, Sandpoint (WU-N, W); EDW. G. STAHL, Deputy Forest Supervisor,

MICHIGAN

Michigan {
Marquette }—S. M. HIGGINS, Acting Forest Supervisor, Au Sable (WU-Am).

MINNESOTA

Minnesota—G. E. MARSHALL, Forest Supervisor, Cass Lake (WU-GN).
Superior—SCOTT LEAVITT, Acting Forest Supervisor, Ely (WU-GN).

MONTANA

Absaroka—V. GIFFORD LANTRY, Forest Supervisor, Livingston (WU-N); J. A. FITZWATER, Deputy Forest Supervisor.
Beartooth—J. F. PRESTON, Acting Forest Supervisor, Red Lodge (WU-N).
Beaverhead—C. K. WYMAN, Forest Supervisor, Dillon (WU-P); R. J. MOORE, Deputy Forest Supervisor.
Bitterroot—W. W. WHITE, Forest Supervisor, Missoula (WU-N); C. H. GREGORY, Lumberman.
Blackfeet—F. N. HAINES, Forest Supervisor, Kalispell (WU-GN); R. P. McLAUGHLIN, Deputy Forest Supervisor.
Cabinet—RALPH H. BUSHNELL, Forest Supervisor, Thompson Falls (WU-N); C. N. WHITNEY, Forest Assistant.
Custer—GLEN A. SMITH, Forest Supervisor, Ashland (WU via Forsyth-N via Forsyth).
Deerlodge—C. C. HALL, Forest Supervisor, Anaconda (P-N); HARRY C. SCHICK, Deputy Forest Supervisor; F. S. PATTON, Forest Assistant.
Flathead—PAGE S. BUNKER, Forest Supervisor, Kalispell (WU-GN); JOHN H. CLACK, Deputy Forest Supervisor.
Gallatin—D. T. CONKLING, Forest Supervisor, Bozeman (WU-N).
Helena—DWIGHT BUSHNELL, Forest Supervisor, Helena (WU-N); J. D. WARNER, Deputy Forest Supervisor.
Jefferson—J. B. SEELY, Forest Supervisor, Great Falls (WU-N); WELLMAN HOLBROOK, Deputy Forest Supervisor; HENRY H. FARQUHAR, Forest Assistant.
Kootenai—DORR SKEELS, Acting Forest Supervisor, Libby (WU-GN); RUTLEDGE PARKER and E. I. TERRY, Forest Assistants.
Lewis and Clark—W. H. DAUGS, Forest Supervisor, Chouteau (WU via Collins-GN via Collins).
Lolo—ELERS KOCH, Forest Supervisor, Missoula (WU, P-N); THOS. C. SPAULDING, Forest Assistant.
Madison—CLIFTON W. HUDSON, Forest Supervisor, Sheridan (WU-N).
Missoula—D. G. KINNEY, Forest Supervisor, Missoula (WU, P-N); RUSSELL G. POND, Deputy Forest Supervisor.
Sioux—See South Dakota.

NORTH DAKOTA

Dakota—C. A. BALLINGER, Forest Supervisor, Camp Crook, S. Dak. (WU via Bellefourche-Am via Bellefourche).

SOUTH DAKOTA

Sioux—C. A. BALLINGER, Forest Supervisor, Camp Crook (WU via Bellefourche—
Ain via Bellefourche).

WASHINGTON

Kaniksu—W. N. MILLAR, Forest Supervisor, Newport (WU-GN); WM. C. LATANE
Forest Assistant.

DISTRICT 2

Colorado, Wyoming, South Dakota, Nebraska, and western Kansas.

Office, Majestic Building, Denver Colo.

SMITH RILEY, District Forester.

P. G. REDINGTON, Assistant District Forester.

J. F. LAWSON, Acting District Law Officer.

F. L. HARVEY, Acting Assistant District Law Officer.

OPERATION

FRED W. MORRELL, Chief.

C. J. STAHL, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, **JOHN A. URBANOWICZ**, District Fiscal Agent.

Maintenance, **F. B. AGEE**.

SILVICULTURE

A. K. CHITTENDEN, Chief.

S. L. MOORE, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECT

Wyoming—

Special timber-sale work, Cheyenne National Forest—**R. W. ALLEN**, Milo.

Planting, **L. C. MILLER**.

Silvics, **C. G. BATES** (in the Field).

A. G. HAMEL, Acting.

PROJECT**Colorado—**

Study of the climatic factors affecting the distribution, growth, and pathological condition of the Rocky Mountain forest trees—C. G. BATES, Fremont Experiment Station, Manitou.

Cooperation, Bureau of Entomology.

PROJECT

Location of insect-infested timber and determination of methods of local control—W. D. EDMONSTON, detailed from the Forest Service, Colorado Springs, Colo.

GRAZING

J. W. NELSON, Chief.

E. N. KAVANAGH, Assistant Chief.

PRODUCTS

H. S. BETTS, in Charge.

PROJECTS**Timber Tests—**

Timber-testing laboratory in cooperation with the University of Colorado, Boulder, Colo.—NORMAN BETTS, in charge; assistants, A. D. WOLFF and H. V. BLANK.

Tests on round timbers of various Rocky Mountain species, including mine timbers, in cooperation with the Northern Coal and Coke Company, Rocky Mountain Fuel Company, and various National Forests.

Tests on western red cedar, lodgepole pine, and Engelmann spruce telephone poles in cooperation with the South Platte Power Company, Central Colorado Power Company, and the Colorado Telephone Company.

Wood Preservation—

Preservative treatment of transmission poles, in cooperation with the Colorado Telephone Company—D. L. CARMODY, Norrie, Colo.

Preliminary operation of an experimental timber treating plant, in cooperation with the Routt National Forest—D. L. CARMODY, Steamboat Springs, Colo.

Compilation of a final report on the year's work at the Forest Service wood-preserving plant at Norrie, Colo.—D. L. CARMODY, Denver, Colo.

Preliminary investigation for determining the feasibility of wood preservation of the mine timbers of the Smuggler-Union Mining Company—H. M. MASON, Jr., Denver, Colo.

NATIONAL FORESTS**COLORADO**

Arapaho—C. G. POOLE, Forest Supervisor, Fraser (WU-Ad); LEE E. COOPER, Deputy Forest Supervisor.

Battlement—JOHN W. LOWELL, Jr., Acting Forest Supervisor, Collbran (WU-WF, G).

Cochetopa—EUGENE WILLIAMS, Forest Supervisor, Saguache (WU-G).

Gunnison—WM. R. KREUTZER, Forest Supervisor, Gunnison (WU-WF, G); E. C. BERKY, Deputy Forest Supervisor; STANLEY B. HALL, Forest Assistant.

Hayden—See Wyoming.

Holy Cross—HARRY H. FRENCH, Forest Supervisor, Glenwood Springs (WU-WF, G); ALBERT H. MILLER, Deputy Forest Supervisor.

La Sal—See Utah, District 4.

Las Animas—C. A. WHITNEY, Acting Forest Supervisor, La Veta (WU-G).

Leadville—THEODORE SHOEMAKER, Acting Forest Supervisor, Leadville (WU, P-WF, G); R. E. CLARK, Deputy Forest Supervisor; J. E. MARTIN, Forest Assistant.

Medicine Bow—H. N. WHEELER, Forest Supervisor, Fort Collins (WU-WF); H. B. HOLROYD, Deputy Forest Supervisor.

Montezuma—RESS PHILLIPS, Forest Supervisor, Mancos (WU-G); FRANK TOMPKINS, Deputy Forest Supervisor.

Pike—C. M. GRANGER, Acting Forest Supervisor, Denver (WU, P-Ad, G, P, US, WF); Monument Nursery—W. SCHRADER, Forest Planting Assistant; W. I. HUTCHINSON, Forest Assistant, Monument.

Rio Grande—A. L. STROUP, Forest Supervisor, Monte Vista (WU-G); WALTER F. BOWERS, Deputy Forest Supervisor; JAY HIGGINS, Forest Assistant.

Routt—J. H. RATLIFF, Forest Supervisor, Steamboat Springs (WU-Ad); P. J. PAXTON, Forest Assistant.

San Isabel—J. N. LANGWORTHY, Forest Supervisor, Westcliffe (WU-G); M. B. WILLEY, Deputy Forest Supervisor.

San Juan—ERNEST W. SHAW, Forest Supervisor, Durango (WU-G); A. L. SWEITZER, Deputy Forest Supervisor; PETER KEPLINGER, Forest Assistant.

Sopris—JOHN McLAREN, Acting Forest Supervisor, Aspen (WU-WF, G); THOS. C. HATTON, Deputy Forest Supervisor.

Uncompahgre—HENRY L. SPENCER, Forest Supervisor, Delta (WU-G); HOWARD S. BUSHNELL, Deputy Forest Supervisor; J. H. RAMSKILL, Forest Assistant.

White River—JAMES A. BLAIR, Forest Supervisor, Meeker (WU-WF, G); ELMER E. STEPHENSON, Deputy Forest Supervisor.

KANSAS

Kansas—B. R. H. D'ALLEMAND, Forest Supervisor, Garden City (WU, P-WF); Garden City Nursery—C. R. TAYLOR, Forest Planting Assistant.

NEBRASKA

Nebraska—W. H. MAST, Forest Supervisor, Halsey (WU-Ad); H. R. SHOCKLEY, Deputy Forest Supervisor; Halsey Nursery—L. BESLEY and C. R. BECHTLE, Forest Planting Assistants.

SOUTH DAKOTA

Black Hills—PAUL D. KELLETER, Forest Supervisor, Deadwood (WU-Ad, Am); JOHN MURDOCH, Jr., and G. A. DUTHIE, Forest Assistants.

WYOMING

Bighorn—W. E. JACKSON, Forest Supervisor, Sheridan (WU-Ad); HERBERT GRAFF, Deputy Forest Supervisor.
Bonneville—FOSTER STEELE, Acting Forest Supervisor, Pinedale (WU-P); H. EARLE FRENCH, Deputy Forest Supervisor.
Cheyenne—P. S. LOVEJOY, Forest Supervisor, Laramie (WU, P-P); JOHN W. STEPHENS, Deputy Forest Supervisor; R. A. STRETCH, Forest Assistant.
Hayden—JAMES BLACKHALL, Forest Supervisor, Encampment (WU, P-P); ARTHUR M. COOK, Deputy Forest Supervisor.
Shoshone—H. W. THURSTON, Forest Supervisor, Cody (WU-Ad).
Sundance—LOUIS KNOWLES, Acting Forest Supervisor, Sundance (WU-Ad Am).

DISTRICT 3

Arizona, Arkansas, Florida, New Mexico, and Oklahoma.
Office, Strickler-Luna Building, Albuquerque, N. Mex.

A. C. RINGLAND, District Forester.
E. H. CLAPP, Assistant District Forester.

H. B. JAMISON, District Law Officer.
BLAKE FRANKLIN, Assistant District Law Officer.

OPERATION

A. O. WAHA, Chief.
A. S. PECK, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.
Accounts, J. J. DUFFY, District Fiscal Agent.
Maintenance, W. B. BUNTON.

SILVICULTURE

T. S. WOOLSEY, Jr., Chief.
A. B. RECKNAGEL, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Arizona—

Preparation of working plan report for Coconino National Forest—J. H. ALLISON; Assistant, P. P. PITCHLYNN, Flagstaff.

Reconnaissance, Prescott National Forest—D. W. ADAMS, in charge; assistants, J. A. BLATHERWICK, G. H. BOHN, T. B. LONGWELL, ROBERT MOAK, and THOMAS F. WELLS, Prescott.

New Mexico—

Check scaling on the Pecos, Jemez, and Carson National Forests—A. A. WYNNE, Lumberman, Santa Fe, N. Mex.

Revision of working plan for Manzano National Forest and collection of data for volume and growth study of woodland species—L. L. JANES, in charge; Assistant, F. R. WIGELY, Albuquerque.

Planting, Chief and Assistant Chief of Silviculture.

Inspection of sowing and planting—R. L. ROGERS, Albuquerque, N. Mex.

Silvics, Coconino Forest Experiment Station—G. A. PEARSON, in charge; Assistants, H. D. BURRALL and C. HELLER, Flagstaff, Ariz.

GRAZING

J. K. CAMPBELL, Chief.

JOHN KERR, Assistant Chief.

NATIONAL FORESTS

ARIZONA

Apache—JOHN D. GUTHRIE, Forest Supervisor, Springerville (WU, P-WF); HARRY C. VILES, Deputy Forest Supervisor; ALDO LEOPOLD, Forest Assistant.

Chiricahua—A. H. ZACHAU, Forest Supervisor, Portal (WU, P-WF).

Coconino—FRANK C. W. POOLER, Forest Supervisor, Flagstaff (WU, P-WF); WIL-LARD M. DRAKE, Deputy Forest Supervisor; J. C. KIRCHER, Forest Assistant.

Coronado—ROBERT J. SELKIRK, Forest Supervisor, Tucson (WU, P-WF).

Crook—T. T. SWIFT, Forest Supervisor, Safford (WU-WF); H. L. JOHNSON, Forest Assistant.

Garces—ROBERT J. SELKIRK, Forest Supervisor, Tucson (WU, P-WF).

Prescott—C. H. HINDERER, Forest Supervisor, Prescott (WU-WF); J. C. MCNELTY, Deputy Forest Supervisor.

Sitgreaves—A. J. MACKAY, Forest Supervisor, Snowflake (WU, P-WF).

Tonto—R. G. WILLSON, Forest Supervisor, Roosevelt (WU-WF); CHAS. H. JENNINGS, Deputy Forest Supervisor.

Zuni—See New Mexico.

ARKANSAS

Arkansas—S. J. RECORD, Forest Supervisor, Mena (WU-WF); S. A. CHAPPELL, Deputy Forest Supervisor.

Ozark—FRANCIS KIEFER, Forest Supervisor, Harrison (WU-WF); RALPH C. HUEY, Deputy Forest Supervisor.

FLORIDA

Choctawhatchee } I. F. ELDREDGE, Acting Forest Supervisor, De Funiak Springs;
Ocala } — W. F. HILL, Deputy Forest Supervisor.

NEW MEXICO

Alamo—ARTHUR M. NEAL, Forest Supervisor, Alamogordo (WU, P-WF).

Carson—ROSS McMILLAN, Forest Supervisor, Antonito, Colo. (WU-G); FREDERICK R. STARR, Forest Assistant.

Chiricahua—See Arizona.

Datil—W. H. GODDARD, Forest Supervisor, Magdalena (WU, P-WF); R. F. BALTHIS, Deputy Forest Supervisor.

Gila—DOUGLAS RODMAN, Forest Supervisor, Silver City (WU-WF); DON P. JOHNSTON, Deputy Forest Supervisor; BARRINGTON MOORE, Forest Assistant; Fort Bayard Nursery—H. C. TURNER, Forest Planting Assistant.

Jemez—FRANK E. ANDREWS, Forest Supervisor, Santa Fe (WU, P-WF); B. M. THOMAS, Deputy Forest Supervisor; WESLEY BRADFIELD, Forest Assistant.

Lincoln—J. A. KINNEY, Forest Supervisor, Capitan (WU, P-WF).

Manzano—W. R. MATTOON, Forest Supervisor, Albuquerque (WU, P-WF); JAMES F. MULLEN, Deputy Forest Supervisor.

Pecos—THOS. R. STEWART, Forest Supervisor, Santa Fe (WU, P-WF); HUGH G. CALKINS, Deputy Forest Supervisor; WESLEY BRADFIELD, Forest Assistant; Las Gallinas Nursery—A. HEDRICKS, Forest Planting Assistant.

Zuni—A. D. READ, Forest Supervisor, Gallup (WU, P-WF); E. H. CRABB, Deputy Forest Supervisor.

OKLAHOMA

Wichita—FRANK RUSH, Game Warden, in charge, Cache (WU-WF).

DISTRICT 4

Utah, southern Idaho, western Wyoming, eastern Nevada, and northwestern Arizona.

Office, First National Bank Building, Ogden, Utah.

CLYDE LEAVITT, District Forester.

FRANKLIN W. REED, Assistant District Forester.

W. C. HENDERSON, District Law Officer.

H. P. DECHANT, Assistant District Law Officer.

OPERATION

R. P. IMES, Chief.

E. H. CLARKE, Assistant Chief.

A. T. MITCHELSON, District Engineer.

Organization, Chief and Assistant Chief of Operation.

Accounts, Q. R. CRAFT, District Fiscal Agent.

Maintenance, FELIX T. MOORE.

SILVICULTURE

L. L. WHITE, Chief.

O. M. BUTLER, Assistant Chief (in the Field).

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Arizona—

Preliminary reconnaissance of Kaibab National Forest—D. F. SEEREY, Lumberman, Kanab, Utah.

Idaho—

Reconnaissance of timber on Sawtooth National Forest—C. P. WILBER, Halley.

Check sealing, Salmon National Forest—JOHN K. KIDD, Scaler, Salmon.

Reconnaissance for Minidoka National Forest—NILS B. ECKBO, Oakley.

Reconnaissance for Pocatello National Forest—A. L. BROWER, Pocatello.

Utah—

Preparation of reconnaissance report and map for Manti National Forest—LINCOLN CROWELL and D. M. LANG, Ogden.

Planting, J. M. FETHEROLF.

Silvics, E. R. HODSON.

GRAZING

HOMER E. FENN, Chief.

A. C. MCCAIN, Assistant Chief.

G. G. BENTZ, Assistant Chief.

SUPPLY DEPÔT

A. M. SMITH, Property Clerk.

PROPERTY AUDIT

J. G. FALCK, Property Auditor.

NATIONAL FORESTS

ARIZONA

Dixie—See Utah.

Kaibab—JOHN H. CLARK, Forest Supervisor, Kanab, Utah (WU-WF); DANIEL K. JUDD, Deputy Forest Supervisor.

IDAHO

Boise—E. GRANDJEAN, Forest Supervisor, Boise (WU-P); D. C. A. GALARNEAU, Forest Assistant.

Cache—See Utah.

- Caribou**—N. E. SNELL, Forest Supervisor, Idaho Falls (WU-P); L. J. PHELAN, Deputy Forest Supervisor; JAMES H. JOHNSON, Grazing Assistant.
- Challis**—DAVID LAING, Forest Supervisor, Challis (WU-P); JOHN A. PEARSON, Deputy Forest Supervisor.
- Idaho**—HENRY A. BERGH, Forest Supervisor, McCall (WU-P).
- Lemhi**—C. I. HUDDLE, Forest Supervisor, Mackay (WU-P); JAMES L. PELTON, Deputy Forest Supervisor.
- Minidoka**—WM. MCCOY, Forest Supervisor, Oakley (WU-P); NILS B. ECKBO, Forest Agent.
- Payette**—GUY B. MAINS, Forest Supervisor, Emmett (WU-P); CARL B. ARENTSON, Deputy Forest Supervisor.
- Pocatello**—J. F. BRUNS, Acting Forest Supervisor, Pocatello (WU-P); A. L. BROWER, Forest Assistant; Pocatello Nursery—P. T. WRENSTED, Forest Ranger.
- Salmon**—JAMES M. RYAN, Acting Forest Supervisor, Salmon (WU-P); F. T. MCLEAN, Forest Assistant.
- Sawtooth**—C. N. WOODS, Forest Supervisor, Hailey (WU-P); H. G. MCPHETERS, Deputy Forest Supervisor; FRANK J. RYDER and C. P. WILBER, Forest Assistants.
- Targhee**—DAVID BARNETT, Forest Supervisor, St. Anthony (WU-P); CHESTER B. MORSE, Forest Assistant; LUCAS W. HASTINGS, Grazing Assistant.
- Weiser**—J. B. LAFFERTY, Forest Supervisor, Weiser (WU-P); W. M. CAMPBELL, Deputy Forest Supervisor; A. E. OMAN, Forest Assistant.

NEVADA

- Humboldt**—C. SYDNEY TREMEWAN, Forest Supervisor, Elko (WU-WF); W. W. BLAKESLEE, Deputy Forest Supervisor.
- Moapa**—HARRY E. MATHIEWS, Acting Forest Supervisor, Las Vegas (WU-WF).
- Nevada**—R. F. MATHIAS, Acting Forest Supervisor, Ely (WU-WF); CHAS. F. PATTERSON, Deputy Forest Supervisor; RUDOLPH DIEFFENBACH, Forest Assistant.
- Toiyabe**—M. S. BENEDICT, Forest Supervisor, Austin (WU, P-WF).

UTAH

- Ashley**—W. M. ANDERSON, Forest Supervisor, Vernal (WU-WF).
- Cache**—CLINTON G. SMITH, Forest Supervisor, Logan (WU-P); J. E. ROTHERY, Deputy Forest Supervisor.
- Dixie**—JAMES E. JEWELL, Forest Supervisor, St. George (WU-WF).
- Fillmore**—WM. HURST, Forest Supervisor, Beaver (WU-WF), GEORGE C. THOMPSON, Deputy Forest Supervisor; REESE W. TAYLOR, Forest Assistant.
- Fishlake**—CHARLES L. SMITH, Forest Supervisor, Salina (WU-WF); OLUF G. NIELSON, Deputy Forest Supervisor.
- La Sal**—JOHN RUS, Forest Supervisor, Moab (WU-WF).
- Manti**—A. W. JENSEN, Forest Supervisor, Ephraim (WU-WF); ERNEST WINKLER, Deputy Forest Supervisor; LINCOLN CROWELL, Forest Assistant; PARLEY CHRISTIANSEN, Grazing Assistant.
- Minidoka**—See Idaho.

Nebo—DAN S. PACK, Forest Supervisor, Nephi (WU-WF).

Pocatello—See Idaho.

Powell—GEO. H. BARNEY, Forest Supervisor, Escalante (WU-WF).

Sevier—O. C. SNOW, Forest Supervisor, Panguitch (WU-WF); FRANK W. SEAMAN, Deputy Forest Supervisor.

Uinta—W. I. PACK, Forest Supervisor, Provo (WU-WF); H. F. STUDLEY, Deputy Forest Supervisor; SIDNEY S. STEWART, Forest Assistant; W. JONES BOWEN, Grazing Assistant.

Wasatch—R. V. R. REYNOLDS, Forest Supervisor, Salt Lake City (WU, P-WF, P); WILLIAM M. MCGHIE, Deputy Forest Supervisor; Wasatch Nursery—N. J. FETHEROLF, Forest Planting Assistant.

WYOMING

Ashley—See Utah.

Caribou—See Idaho.

Targhee—See Idaho.

Teton—R. E. MILLER, Forest Supervisor, Jackson (WU-P).

Wyoming—JOHN RAPHAEL, Forest Supervisor, Afton (WU-P); H. E. WOOLEY, Deputy Forest Supervisor; JOHN E. INGRAM, Forest Assistant; GLIDDEN J. BARSTOW, Grazing Assistant.

DISTRICT 5

California and southwestern Nevada.

Office, First National Bank Building, San Francisco, Cal.

F. E. OLMSTED, District Forester.

COERT DUBOIS, Assistant District Forester.

E. A. LANE, District Law Officer.

PAUL MITCHELL, Assistant District Law Officer.

OPERATION

ROY HEADLEY, Chief.

R. F. HAMMATT, Assistant Chief.

Organization, Chief and Assistant Chief of Operation.

Accounts, CLARENCE WILEY, District Fiscal Agent.

Maintenance, JAMES B. JEFFRIES.

SILVICULTURE

G. M. HOMANS, Chief.

T. D. WOODBURY, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Supervision of operations on the Standard Lumber Company's timber sale, Stanislaus National Forest—J. C. ELLIOTT, Lumberman, Sonora, Cal.

Examination of timber trespass and of proposed sale areas in the recent addition to the Lassen National Forest—C. H. ENSIGN, Lumberman, Red Bluff, Cal.

Examination of proposed sale areas on the Plumas National Forest—PATRICK KENNEDY, Lumberman, Quincy, Cal.

A study of eucalypts in the Hawaiian Islands in cooperation with the territorial Forester—L. MARGOLIN, Honolulu, Hawaii.

Examination of timber trespass cases on the Klamath National Forest—SWIFT BERRY, Yreka, Cal.

Planting, G. W. PEAVY; C. A. KUPFER, Assistant.

PROJECTS

Construction of a coniferous nursery, location of permanent experimental planting areas, and the collection of seed on the Shasta National Forest—N. O. TORSTENSON, Planting Assistant, California.

Preparation of a plan for experimental eucalypts planting in southern California—J. M. GRANT, Santa Barbara, Cal.

Locating experimental planting areas on the Sequoia National Forest—C. A. KUPFER, Hot Springs, Cal.

Silvics, Chief and Assistant Chief of Silviculture.

GRAZING

JOHN H. HATTON, Chief.

M. B. ELLIOTT, Assistant Chief.

PRODUCTS

C. S. SMITH, in Charge.

PROJECTS

Timber Tests—

Testing laboratory in cooperation with the University of California, Berkeley, Cal.—A. L. HEIM, in charge; assistants, G. R. GESSERT and A. K. ARMSTRONG.

Tests on redwood in cooperation with the California Redwood Association.

Wood Preservation—

Experiments to determine the best methods of seasoning *Eucalyptus globulus* poles and logs, in cooperation with the estate of Adolph Sutro, the Pacific Land Investment Company, the Mount Tamalpais Cemetery Association, and the Parkside Realty Company; and *Eucalyptus viminalis* logs, in cooperation with the University of California—C. STOWELL SMITH, San Francisco, Cal.

Experiments to determine the relative resistance to marine wood borers of different species of untreated timber and of Douglas fir treated by various preservatives and coatings—A. K. ARMSTRONG, San Francisco, Cal.

Study of the conditions found in the Eagle-Shawmut mines, Chinese camp, and the Empire mines, Grass Valley, with a view to recommending cooperation in the preservative treatment of mine timbers—C. STOWELL SMITH, San Francisco, Cal.

NATIONAL FORESTS**CALIFORNIA**

Angeles—R. H. CHARLTON, Forest Supervisor, Los Angeles (WU, P-WF); ERNEST B. LONG, Deputy Forest Supervisor; Lytle Creek Nursery—SEROPE Y. PARNAY, Forest Planting Assistant, San Bernardino.

California—ERNEST BRITTEN, Forest Supervisor, Willows (P-WF); N. B. DREW, Deputy Forest Supervisor.

Cleveland—H. A. E. MARSHALL, Forest Supervisor, San Diego (WU, P-WF); PERCY L. DAY, Deputy Forest Supervisor; F. L. RICKEY, Planting Assistant.

Inyo—A. H. HOGUE, Forest Supervisor, Bishop (WU-WF); JOHN D. COFFMAN, Forest Assistant.

Klamath—R. L. FROMME, Forest Supervisor, Yreka (P-WF); FRANK W. HARLEY, Deputy Forest Supervisor; SHIRLEY W. ALLEN, Forest Assistant.

Lassen—L. A. H. KLING, Forest Supervisor, Red Bluff (P-WF); J. C. LA PLANT, Deputy Forest Supervisor; HENRY L. BOLDENWECK, Forest Agent.

Modoc—C. E. RACHFORD, Forest Supervisor, Alturas (P-WF); VERNON L. BONNER, Deputy Forest Supervisor; BELKNAP C. GOLDSMITH, Forest Assistant.

Mono—See Nevada.

Monterey—RAYMOND TYLER, Forest Supervisor, Salinas (WU-WF).

Plumas—L. A. BARRETT, Forest Supervisor, Quincy (WU-WF); W. G. DURBIN, Deputy Forest Supervisor; J. R. HALL, Forest Assistant.

Santa Barbara—WILLIS M. SLOSSON, Forest Supervisor, Santa Barbara (P-WF); H. G. MERRILL, Deputy Forest Supervisor.

Sequoia—E. A. SHERMAN, Forest Supervisor, Hot Springs, Tulare County (WU via Portersville-WF); W. C. BURTON, Deputy Forest Supervisor.

Shasta—W. B. RIDER, Forest Supervisor, Sisson (P-WF); PHILIP T. HARRIS, Deputy Forest Supervisor; ALLEN H. HODGSON, Forest Assistant.

Sierra—C. H. SHINN, Forest Supervisor, Northfork (WU via Fresno-WF); H. J. TOMPKINS, Forest Assistant.

Stanislaus—R. W. AYERS, Forest Supervisor, Sonora (WU-WF); D. N. ROGERS, Deputy Forest Supervisor; J. V. WULFF, Forest Assistant.

Tahoe—R. L. P. BIGELOW, Forest Supervisor, Nevada City (WU-WF); M. B. PRATT, Deputy Forest Supervisor; J. ALFRED MITCHEL, Forest Assistant.
Trinity—F. H. HAFLEY, Forest Supervisor, Weaverville (WU-WF); W. A. HUESTIS, Deputy Forest Supervisor; ERNEST V. JOTTER, Forest Assistant.

NEVADA

Inyo—See California.

Mono—WM. M. MAULE, Forest Supervisor, Gardnerville (WU-WF).

Tahoe—See California.

DISTRICT 6

Washington, Oregon, and Alaska.

Office, Beck Building, Portland, Oreg.

C. S. CHAPMAN, District Forester.

GEO. H. CECIL, Assistant District Forester.

C. R. PIERCE, District Law Officer.

W. F. STALEY, Assistant District Law Officer.

OPERATION

C. H. FLORY, Chief.

C. J. BUCK, Assistant Chief.

W. E. HERRING, District Engineer.

Organization, Chief and Assistant Chief of Operation.

Accounts, A. H. COUSINS, District Fiscal Agent.

Maintenance, SHIRLEY BUCK.

SILVICULTURE

F. E. AMES, Chief.

C. S. JUDD, Assistant Chief.

Timber Sales, Chief and Assistant Chief of Silviculture.

PROJECTS

Oregon—

Scaling on the Crater National Forest—D. L. MCKAY, Jr., Scaler, Medford.

Washington—

Examination of proposed sale areas on the Olympic National Forest—J. P. HUGHES, Lumberman, Olympia.

Scaling on the Columbia National Forest—EDWIN C. ERICKSON, Scaler, Carson.
Reconnaissance of the Olympic National Forest—MAX ROTHKUGEL, Forest Assistant, Olympia.

Planting, J. F. KÜMMEL.

Silvics, T. T. MUNGER.

GRAZING

HOWARD K. O'BRIEN, Chief.

T. P. MACKENZIE, Assistant Chief.

PRODUCTS

J. B. KNAPP, in Charge.

PROJECTS

Timber Tests—

Testing laboratory in cooperation with the University of Washington, Seattle, Wash.—O. P. M. Goss in charge; assistants, P. S. BUHL, C. W. ZIMMERMAN.

Tests of treated Douglas fir in cooperation with the Pacific Creosoting Company.

Tests of fire-killed Douglas fir in cooperation with the Clarke County Timber Company and the Eastern and Western Lumber Company.

Wood Preservation—

Supervision of the treatment of test timbers in cooperation with the Pacific Creosoting Company—H. B. OAKLEAF, Portland, Oreg.

Wood Utilization—

Study, of wood-using industries and markets for forest products—J. B. KNAPP, Portland, Oreg.

Study of the waste due to the manufacture of even lengths only in planing-mill products—J. B. KNAPP and H. B. OAKLEAF, Portland, Oreg.

Study of the market for and uses of forest products at Tacoma, Wash.—JOHN F. SULLIVAN, Tacoma, Wash.

Study of the shingle industry in the State of Washington—J. B. KNAPP and JOHN F. SULLIVAN, Portland, Oreg.

NATIONAL FORESTS

ALASKA

Chugach—W. A. LANGILLE, Forest Supervisor, Ketchikan (SC, U. S. A., WU-AP); HOWARD M. CONRAD, Deputy Forest Supervisor; LAGE WERNSTEDT, Forest Assistant.

Tongass—W. A. LANGILLE, Forest Supervisor, Ketchikan (SC, U. S. A., WU-AP); HOWARD M. CONRAD, Deputy Forest Supervisor; LAGE WERNSTEDT, Forest Assistant.

CALIFORNIA

Crater—See Oregon.

Siskiyou—See Oregon.

OREGON

- Cascade**—C. R. SEITZ, Forest Supervisor, Eugene (WU, P-WF); J. R. HARVEY, Deputy Forest Supervisor; E. B. STARR, Forest Assistant.
- Crater**—M. L. ERICKSON, Forest Supervisor, Medford (WU, P-WF); S. S. SWENNING, Deputy Forest Supervisor; H. D. FOSTER and B. T. HARVEY, Forest Assistants.
- Deschutes**—A. S. IRELAND, Forest Supervisor, Prineville (PT & T-WF, via Shaniko).
- Fremont**—GUY M. INGRAM, Forest Supervisor, Lakeview (WU via Klamath Falls-WF); G. D. BROWN, Deputy Forest Supervisor.
- Malheur**—CY. J. BINGHAM, Forest Supervisor, John Day (WU via Baker City-WF via Baker City).
- Oregon**—T. H. SHERRARD, Forest Supervisor, Portland (WU, P-WF, N, P); RALPH S. SHELLEY, Deputy Forest Supervisor; W. B. OSBORNE, Forest Assistant.
- Siskiyou**—M. J. ANDERSON, Forest Supervisor, Grants Pass (WU, P-WF); HUGH M. GUTHRIE, Deputy Forest Supervisor; H. HAEFNER, Forest Assistant.
- Siuslaw**—A. E. COHOON, Forest Supervisor, Eugene (WU, P-WF); DAVID E. FITTON, Deputy Forest Supervisor.
- Umatilla**—THOS. E. CHIDSEY, Forest Supervisor, Heppner (WU-P).
- Umpqua**—S. C. BARTRUM, Forest Supervisor, Roseburg (WU, P-WF); H. M. HALE, Deputy Forest Supervisor; E. H. McDANIELS, Forest Assistant.
- Wallowa**—HARVEY W. HARRIS, Acting Forest Supervisor, Wallowa (WU-P); SHERMAN A. BROWN, Deputy Forest Supervisor; CHAS. BLACK, Grazing Assistant.
- Wenaha**—See Washington.
- Whitman**—HENRY IRELAND, Forest Supervisor, Sumpter (WU via Baker City-WF via Baker City).

WASHINGTON

- Chelan**—GEORGE W. MILHAM, Forest Supervisor, Chelan (PT & T-GN via Wenatchee); D. S. RICE, Deputy Forest Supervisor; D. B. REYNOLDS, Forest Assistant.
- Columbia**—HOMER ROSS, Acting Forest Supervisor, Portland, Oreg. (WU, P-WF, N, P); ARTHUR R. WILCOX, Forest Assistant.
- Colville**—C. C. REID, Acting Forest Supervisor, Republic (WU, P-GN).
- Olympic**—R. E. BENEDICT, Forest Supervisor, Olympia (WU-GN, N); E. E. FISHEL, Deputy Forest Supervisor.
- Rainier**—G. F. ALLEN, Forest Supervisor, Orting (WU-N); H. L. HURD, Deputy Forest Supervisor; C. P. WILLIS and E. J. FENBY, Forest Assistants.
- Snoqualmie**—B. P. KIRKLAND, Forest Supervisor, Seattle (WU, P-N, GN, WF); E. T. CLARK, Forest Assistant.
- Washington**—C. H. PARK, Forest Supervisor, Bellingham (WU, P-GN, N); A. A. PARKER, Deputy Forest Supervisor; F. H. BRUNDAGE and M. L. MERRITT, Forest Assistants.
- Wenaha**—J. M. SCHMITZ, Forest Supervisor, Walla Walla (WU-N, P).
- Wenatchee**—A. H. SYLVESTER, Forest Supervisor, Leavenworth (WU-GN); S. A. BLANKENSHIP, Deputy Forest Supervisor; FRED W. CLEATOR, Forest Assistant.

SERVICE CHANGES IN NOVEMBER

APPOINTED

Forester—

PUBLICATION: CLAUDE M. BALLARD, Reader.

FOREST STATISTICS: ARTHUR B. STROUGH, Collaborator.

Products—

LABORATORY: CLYDE H. TEESDALE, Engineer in Wood Preservation.

REINSTATED

Silviculture—

FEDERAL COOPERATION: E. A. BRANIFF, Forest Supervisor.

CHANGE IN DESIGNATION

District 6—

OFFICE OF DISTRICT FORESTER: C. S. CHAPMAN, Assistant Forester to District Forester; E. T. ALLEN, District Forester to Forest Assistant.

FURLOUGHED

Forester—

PUBLICATION: WILLIS G. BROWN, Reader.

Silviculture—

FEDERAL COOPERATION: ALLAN B. PATTERSON, Chief; E. A. BRANIFF, Forest Supervisor.

With profound regret announcement is made of the death, on October 30, of Henry C. Towers, Chief of the Section of Purchase, in the Forest Service. Mr. Towers was born on July 29, 1849, in Washington, D. C. On July 1, 1901, he was appointed an Expert in the Forest Service and placed in charge of the purchase of supplies. To his integrity of character was added a genial and helpful personality which endeared him to his associates in the Service. His example of unselfish devotion to the welfare and happiness of others will be his lasting memorial.

With deep regret announcement is made of the death, on October 29, 1909, of Edward Romey, Assistant Forest Ranger on the Teton National Forest, Jackson, Wyo.

SERVICE NOTES FOR DECEMBER

These notes contain instructions and necessary information for Forest officers, and will, therefore, be carefully read and kept on file for reference.

OFFICE OF THE FORESTER

LAW

Patents—

The application of John M. Nelson, Jr., for a patent on a process for preserving timber has been granted by the Patent Office and letters patent have been issued. The Patent Office has also acted favorably upon the application for patent of Harry Tiemann, of the Forest Service, for a process of rapidly drying timber, though the letters patent have not yet been issued. According to the application of the inventor in each of these two cases, the process may be used freely by the Government, or by any person in the United States.

Policy—

In a letter to the District Forester at Denver (copies of which were sent to the other Districts), the following procedure was outlined in connection with the cutting of timber for the purpose of clearing a right of way across a mining location, which has been made subsequent to the right-of-way permit: (1) For timber removed which is not needed for the developemnt of the mine, payment should be made to the United States. (2) Timber removed which is needed for the development of the mine should be delivered to the claimant. (3) If "2" is impracticable for any reason, payment for the timber should be made to the United States and a free-use permit given the claimant for an even quantity of timber. (4) If the validity of the mining location is uncertain payment should be made to the United States. (5) If the validity of the mining location is subsequently established, a free-use permit should be given the claimant for an amount of timber equal to that taken.

Extra Copies, Trespass Report—

When making reports to the District office in cases of timber trespass, special-use trespass, grazing trespass, fire trespass, and in all other cases when it may be necessary to refer the matter to some other Department of the Government for action, the reports should be forwarded in triplicate, as in the case of claims reports. It is usually necessary to forward one report to the Washington office of the Department concerned, while another copy is usually desired in the Office of the District Attorney, or other local officer; and, of course, one is necessary in the District files. The expense of making these is much less when the reports are originally prepared than later in the District office.

Timber Trespass (Criminal)—

James A. Hopper was indicted under the Act of March 3, 1875 (1 Supp. Rev. Stat. 88), at the October session of the Federal Grand Jury, convened in Little Rock, Ark., for seizing timber which had been posted with United States property notices and stamped with a United States marking hatchet. At the trial, held October 30, Judge Trieber, of the Eastern District of Arkansas, gave peremptory instructions to the jury to bring in a verdict of not guilty.

In the action of ejectment instituted against Zilpha Patterson, on the Prescott, recommendations have been made to the Department of Justice that the proceedings be discontinued, as the defendant has removed from the ranger station.

Fined for Leaving Fire Unextinguished—

On November 8, W. F. Euster and Jack Huston pleaded guilty before the State Court of Oregon and were fined \$25 each for leaving a camp fire unextinguished on the Wallowa National Forest.

OPERATION**Complaint and Charges Should be Fairly Discussed—**

In many instances unnecessary friction has arisen through the failure of supervisors to fully understand the other man's side of the question in cases of trespass by Forest users or of arbitrary action by subordinate Forest officers. This has been particularly the case where supervisors have felt obliged to make charges against Forest officers. In all fairness to himself and to the man against whom the action is contemplated, the supervisor should lay the case in person before the man and discuss fully each point in the case before taking or recommending final action. This may not be possible in all cases affecting users of the National Forest, but it should be done in every case of complaint or charges against a Forest officer.

Initialing in Supervisors' Offices—

File carbons of letters and other papers prepared in supervisors' offices should have affixed upon them by stamp or pen the names of the persons signing them. When the signer is not the author the latter should initial in the lower left-hand corner of the file carbon.

The stenographer will stamp his own initials in the lower right-hand corner of each file carbon. If the letter contains inclosures, or if future action is promised, the stenographer will stamp his initials a second time as a guaranty that the inclosure has been prepared or that the action promised has been noted.

Any rubber stamps needed can be obtained upon requisition from the Property Clerk at Ogden.

Forest Service Calendar for 1910—

The Service calendar for 1910 will be distributed during December. The revision of the schedule of reports will not be completed in time for this distribution. The new schedule will be issued in pads by the Property Clerk at Ogden as soon as printed, and will be so made as to be easily attached to the calendar by means of the ordinary brass fastener.

Reimbursement for Lodging at Ranger Stations—

(Amends note on page 66, September (1908) Field Program.)

Forest officers should in no case be charged for lodging at a Government Ranger Station when the accommodation consists of simply the use of a room involving no personal expense to the Forest Officer furnishing the lodging. When, however, the ranger is living in a house of his own, or one rented by him, it is entirely reasonable that a charge for lodging be made to Forest officers. Very often ranger stations are so located that Forest officers use them frequently and under conditions which make it impracticable for these officers to carry bedding with them. In such cases it is proper that a charge for lodging, not to exceed 25 cents per night, be made by the Forest officer furnishing blankets and linen, and, in the future, accounts for such expenses will be allowed. It will not be required hereafter that an explanation accompany charges for such lodging, but it is expected that the spirit of these instructions will be carefully followed by all Forest officers.

Fire Request—

Form 445, a placard requesting the public to give notice of fires to Forest officers, is available for distribution from the Supply Depot and should be given the fullest use on the National Forests. Sample copies have been mailed by the Property Clerk to Supervisors.

Boundary Notices and Fire Warnings—

In some places old boundary notices and fire warnings, which were posted years ago, remain and are now dilapidated and out of date. Since these notices are very often in prominent places along important roads and trails, Forest officers are expected to see that they are kept up to date and renewed whenever necessary.

Civil-Service Eligibles—

The attention of District Foresters and of supervisors is called to the civil-service requirement that eligibles certified by the Commission must not be subjected to an inquiry into their qualifications in addition to the information given in their examination papers. While information coming incidentally to the knowledge of appointing officers outside of that contained in the examination papers can not be entirely ignored, it must be remembered that the qualifications of eligibles have been officially determined by the examination, and that the only allowable inquiries are in regard to character and personality. Anything in the nature of a second examination direct or indirect, is contrary to the civil-service regulations.

Filing Applications for Positions—

Supervisors who wish to keep all correspondence regarding applications for positions separate from other miscellaneous correspondence may insert, behind the general file, a guide marked "Applications for Positions," with either a single folder or an additional A to Z file, as may be required by the volume of correspondence.

Names of Appointees—

Frequent errors in names of appointees, given in recommendations to the Secretary of Agriculture, have led to subsequent corrections and much needless clerical work in

the office of the Appointment Clerk. Steps must be taken by officers originating recommendations to give the names correctly, and that in every case the recommendation give the first name in full, the middle initial or initials, and the surname in full. The name signed to the oath of office must agree in every respect with the name given in the recommendation.

SILVICULTURE

Timber Cut and Sold—

The attention of supervisors is again called to the rule that when submitting, on Form 949, the monthly report of timber cut and sold, the scale of converting factors which has been furnished should be used, and the totals should always be expressed in the denominations called for. Failure on the part of any supervisor to forward the report promptly delays the report to the Forester, and must be avoided.

GRAZING

Uniform Schedule of Grazing Fees—

Hereafter all rates for grazing fees on the National Forests will be based upon the yearlong rate for cattle. The yearlong rates for horses will be from 25 to 40 per cent more, and the yearlong rates for swine from 25 to 40 per cent less than the rate for cattle. The yearlong rates for sheep and goats will be as follows:

From 10 to 12 cents on Forests where the rate for cattle is 35 cents.

From 12 to 14 cents on Forests where the rate for cattle is 40 cents.

From 12 to 15 cents on Forests where the rate for cattle is 45 cents.

From 14 to 16 cents on Forests where the rate for cattle is 50 cents.

From 15 to 18 cents on Forests where the rate for cattle is 60 cents.

The rates for all kinds of stock for periods shorter than yearlong will be based upon a monthly charge of one-tenth of the annual rate per month for periods of four months or over, with 20 per cent added for periods of less than four months, or periods beginning between July 15 and October 15, and provided that the minimum rate for any short period will not be less than 20 cents per head on cattle, 25 cents per head on horses, 12 cents per head on swine, or 5 cents per head on sheep or goats. An extra charge of 2 cents per head will be made for sheep or goats which are allowed to enter the National Forests for the purpose of lambing or kidding. No charge will be made for animals under 6 months of age at the time of entering the Forest, which are the natural increase of stock upon which fees are paid or for those born during the season for which permit is allowed, provided that at the end of the summer season the number of animals over 6 months of age to be grazed during the winter season does not exceed the number covered by yearlong permit. Supplemental permits for the excess number of stock may be issued whenever this would not result in injury to the Forest.

New Form of Notice to Grazing Applicants—

A new form designated as 861-G, which is a consolidation of Forms 762 and 861, will be issued about December 1. It will be used in giving notice of the approval of

grazing applications and as a letter of transmittal for payments on account of grazing permits. A supply of this new form will be sent to each of the supervisors without requisition, and it is requested that its use be adopted not later than January 1, 1910. This form supersedes Form 762, but does not affect old Form 861, which will still be used for all remittances except for grazing permits.

SERVICE PUBLICATIONS ISSUED IN NOVEMBER

Bulletin 76. How to Grow and Plant Conifers in the Northeastern States.

Bulletin 78. Wood Preservation in the United States.

Circular 168. Commercial Importance of the White Mountain Forests.

SERVICE ORDER

SERVICE ORDER 39

(Amends Service Order 27)

REQUISITIONS

NOVEMBER 20, 1909

Section 143 of The Green Book as given in Service Order 27 is hereby amended to read as follows:

Sec. 143: Requisition.—Supplies and equipment may be procured upon requisition on the Property Clerk. (See Form 258, Index of Standard Forms, and Form 261, List of Standard Articles of Equipment and Supplies.)

Requisitions must be made in duplicate on Form 668. One copy will be sent to the Property Clerk without a letter of transmittal unless an explanation is necessary.

On January 1, April 1, July 1, and October 1, of each year, Supervisors, Chiefs of Maintenance, and men in charge of field stations will make requisitions for the equipment, stationery, office supplies, and printed forms required by their respective offices for the ensuing three months. Each sheet will be marked "Quarterly requisition."

Requisitions for graphic work required in the Districts should be made on the District Forester. Requisitions for photographic films, photographic work, and published maps should be sent to the Forester and should be made very specific to avoid misunderstanding. Form 988 will be used for this purpose.

OVERTON W. PRICE,
Associate Forester.

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